

# **State of Delaware**

## **COLLAPSE RESCUE TRUCK**

### **Invitation to Bid**

**Contract No. SHS-11-002-COLLAPSERT**

**January 18, 2011**

***- Deadline to Respond -  
February 23, 2011  
3 p.m. EST***

**CONTRACT NO. SHS-11-002-CollapseRT**

**ALL BIDDERS:**

The enclosed packet contains an "INVITATION TO BID" for Collapse Rescue Truck. The invitation consists of the following documents:

**INVITATION TO BID - CONTRACT NO. SHS-11-002-CollapseRT**

- 1 DEFINITIONS and GENERAL PROVISIONS
- 2 SPECIAL PROVISIONS and SPECIFICATIONS
- 3 BID QUOTATION REPLY SECTION
  - A - NO BID REPLY FORM
  - B - BID BOND
  - C - NON-COLLUSION STATEMENT AND ACCEPTANCE
  - D - QUOTATION SUMMARY
  - E - OFFICE OF MINORITY AND WOMEN BUSINESS ENTERPRISE (OMWBE) APPLICATION

In order for your bid to be considered, the bid quotation reply section shall be executed completely and correctly and returned in a sealed envelope clearly displaying the contract number, by February 23, 2011 at 3 p.m. EST.

**Bids shall be submitted to:**

**STATE OF DELAWARE  
Department of Safety and Homeland Security  
Central Fiscal Office  
303 Transportation Circle  
Dover, Delaware 19901**

Please review and follow the information and instructions contained in the general and special provisions section of the invitation. Should you need additional information, please call Tom Yeasted at (302) 659-2352.

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**DEPARTMENT OF SAFETY AND HOMELAND SECURITY  
DELAWARE EMERGENCY MANAGEMENT AGENCY**

**DEFINITIONS  
AND  
GENERAL PROVISIONS**

The attached Definitions and General Provisions apply to all contracts and are part of each invitation to bid. The requirement to furnish a bid bond and performance bond is applicable unless waived in the Special Provisions. Should the General Provisions conflict with the Special Provisions, the Special Provisions shall prevail. Bidders or their authorized representatives are required to fully acquaint themselves as to State procurement laws and regulations prior to submitting bid.

## **DEFINITIONS**

Whenever the following terms are used, their intent and meaning shall be interpreted as follows:

**STATE**: The State of Delaware

**AGENCY**: State Agency as noted on cover sheet.

**DESIGNATED OFFICIAL**: The agent authorized to act for the Agency.

**BID INVITATION**: The "bid invitation" or "invitation to bid" is a packet of material sent to vendors and consists of General Provisions, Special Provisions, specifications, and enclosures.

**GENERAL PROVISIONS**: General Provisions are instructions pertaining to contracts in general. They contain, in summary, requirements of laws of the State, policies of the Agency, and instructions to vendors.

**SPECIAL PROVISIONS**: Special Provisions are specific conditions or requirements peculiar to the contract under consideration and are supplemental to the General Provisions. Should the Special Provisions conflict with the General Provisions, the Special Provisions shall prevail.

**BIDDER OR VENDOR**: Any individual, firm, or corporation formally submitting a proposal for the material or work contemplated, acting directly or through a duly authorized representative.

**PROPOSAL**: The offer of the bidder submitted on the approved form and setting forth the bidder's prices for performing the work or supplying the material or equipment described in the specifications.

**SURETY**: The corporate body which is bound with and for the contract, or which is liable, and which engages to be responsible for the contractor's payments of all debts pertaining to and for its acceptable performance of the work for which it has contracted.

**BIDDER'S DEPOSIT**: The security designated in the proposal to be furnished by the bidder as a guaranty of good faith to enter into a contract with the Agency if the work to be performed or the material or equipment to be furnished is awarded to the bidder.

**CONTRACT**: The written agreement covering the furnishing and delivery of material or work to be performed.

**CONTRACTOR**: Any individual, firm, or corporation with whom a contract is made by the Agency.

**CONTRACT BOND**: The approved form of security furnished by the contractors and its surety as a guaranty of good faith on the part of the contractor to execute the work in accordance with the terms of the contract.

## SECTION A - GENERAL PROVISIONS

1. **BID INVITATION:**

See "Definitions".

2. **PROPOSAL FORMS:**

The invitation to bid shall contain pre-printed forms for use by the vendor in submitting its bid. The forms shall contain basic information such as description of the item and the estimated quantities and shall have blank spaces for use by the vendor for entering information such as unit bid price, total bid price, etc.

3. **INTERPRETATION OF ESTIMATES:**

- a. The attention of bidders is called to the fact that, unless stated otherwise, the quantities given in the proposal form are to be considered to be approximate only and are given as a basis for the comparison of bids. The Agency may increase or decrease the amount of any item as may be deemed necessary or expedient, during the period of the contract.
- b. An increase or decrease in the quantity for any item is not sufficient ground for an increase or decrease in the unit price.

4. **SILENCE OF SPECIFICATIONS:**

The apparent silence of the specifications as to any detail, or the apparent omission from it of detailed description concerning any point, shall be regarded as meaning that only the best commercial practice is to prevail and only material and workmanship of the first quality are to be used. Proof of specifications compliance will be the responsibility of the vendor.

5. **EXAMINATION OF SPECIFICATIONS AND PROVISIONS:**

The bidder shall examine carefully the proposal and the contract forms for the material contemplated. The bidder shall investigate and satisfy itself as to the conditions to be encountered, quality and quantities of the material to be furnished, and the requirements of the Special Provisions and the contract. The submission of a proposal shall be conclusive evidence that the bidder has made examination of the aforementioned conditions.

6. **PREPARATION OF PROPOSAL:**

- a. The bidder's proposal shall be written in ink or typewritten on the form provided.
- b. If items are listed with a zero quantity, bidder shall state unit price **ONLY** (intended for open end purchases where estimated requirements are not known). The proposal shall show a total bid price for each item bid and the total bid price of the proposal excluding zero quantity items.

7. **PRICES QUOTED:**

The prices quoted are those for which the material will be furnished F.O.B. Ordering Agency and include all charges that may be imposed during the period of the contract.

8. **DISCOUNT:**

No qualifying letter or statements in or attached to the proposal, or separate discounts will be considered in determining the low bid except as may be otherwise herein noted. Cash or separate discounts should be computed and incorporated into unit bid price(s).

9. **SAMPLES OR BROCHURES:**

Samples or brochures may be required by the agency for evaluation purposes. They shall be such as to permit the Agency to compare and determine if the item offered complies with the intent of the specifications.

10. **PROPOSAL GUARANTY; BID BOND:**

- a. Each bidder shall submit with its proposal a guaranty in sum equal to at least 10% of the total value of its bid, according to Delaware Code Title 29, Section 6927(a).
- b. This bid bond shall be submitted in the form of good and sufficient bond drawn upon an insurance or bonding company authorized to do business in the State of Delaware, to the State of Delaware for the benefit of the Agency, or a certified check drawn on a reputable banking institution and made payable to the Agency in the requirement amount. If Agency bond form is not utilized, the substituted bond forms must conform to the minimum of conditions specified in the Agency bond form.
- c. This requirement has been waived.

11. **DELIVERY OF PROPOSALS:**

Proposals shall be delivered in sealed envelopes, and shall bear on the outside the name and address of the bidder as well as the designation of the contract. Proposals forwarded by U.S. Mail shall be sent first class to the address listed below. Proposals forwarded by delivery service other than the U.S. Mail or hand delivered must be delivered to the address listed below. All bids must clearly display the bid number on the envelope.

- A. U.S. Mail (***not recommended***): Department of Safety and Homeland Security  
Secretary's Office - Central Fiscal Office  
P.O. Box 818  
Dover, Delaware 19903
- B. Other Delivery: Department of Safety and Homeland Security  
Central Fiscal Office  
303 Transportation Circle  
Dover, Delaware 19901

All proposals will be accepted at the time and place set in the advertisement. Bidder bears the risk of delays in delivery. Proposals received after the time set for public opening will be returned unopened.

12. **WITHDRAWAL OF PROPOSALS:**

A bidder may withdraw its proposal unopened after it has been deposited, if such a request is made prior to the time set for the opening of the proposal.

13. **PUBLIC OPENING OF PROPOSALS:**

The bids shall be publicly opened at the time and place specified by the Agency. Bidders or their authorized representatives are invited to be present.

14. **PUBLIC INSPECTION OF PROPOSALS:**

If the bidder designates a portion of its bid as confidential, it shall isolate and identify in writing the confidential portions. The bidder shall include with this designation a statement that explains and supports the firm's claim that the bid items identified as confidential contain trade secrets or other proprietary data.

15. **DISQUALIFICATION OF BIDDERS:**

Any one or more of the following causes may be considered as sufficient for the disqualification of a bidder and the rejection of its proposal or proposals:

- a. More than one proposal for the same contract from an individual, firm, or corporation under the same or different names.
- b. Evidence of collusion among bidders.
- c. Unsatisfactory performance record as evidenced by past experience.
- d. If the unit prices are obviously unbalanced either in excess or below reasonable cost analysis values.
- e. If there are any unauthorized additions, interlineation, conditional or alternate bids or irregularities of any kind which may tend to make the proposal incomplete, indefinite, or ambiguous as to its meaning.
- f. Non-attendance of mandatory pre-bid meetings shall be cause of disqualification.
- g. Failure to return the NON-COLLUSION STATEMENT provided near the end of this package with the bid or proposal. The bid or proposal marked "Master" or "Original" must have handwritten signatures. Signature stamps or photocopies of this form are not acceptable for the master proposal. Photocopies of the form may be used in any additional copies of the bid or proposal.

## **SECTION B - AWARD AND EXECUTION OF CONTRACT**

### **1. CONSIDERATION OF BIDS:**

- a. After the proposals have been opened, the bids will be tabulated and the results will be made available to the public. Tabulations of the bids will be based on the correct summation of items at the unit price bid.
- b. The right is reserved to waive technicalities, to reject any or all bids, or any portion thereof, to advertise for new proposals, to proceed to do the work otherwise, or to abandon the work, if in the judgment of the Agency or its agent, the best interest of the State will be promoted thereby.

### **2. MATERIAL GUARANTY:**

Before any contract is awarded, the successful bidder may be required to furnish a complete statement of the origin, composition and manufacture of any or all of the material to be used in the contract together with such samples as may be requested for the purpose of testing.

### **3. CONTRACT AWARD:**

Within thirty days from the date of opening proposals, the contract will be awarded or the proposals rejected.

### **4. EXECUTION OF CONTRACT:**

- a. The bidder to whom the award is made shall execute a formal contract and bond within twenty days after date of official notice of the award of the contract.
- b. If the successful bidder fails to execute the required contract and bond, as aforesaid, within twenty days after the date of official notice of the award of the contract, its proposal guaranty shall immediately become forfeited as liquidated damages. Award will then be made to the next lowest qualified bidder of the work or re-advertised, as the Agency may decide.

### **5. REQUIREMENT OF CONTRACT BOND:**

- a. Successful bidders shall furnish bond, simultaneously with the execution of the formal contract, to the State of Delaware for the benefit of the Agency with surety in the amount of 100% of the total contract award or as otherwise provided in the Special Provisions. Said bonds shall be conditioned upon the faithful performance of the contract.
- b. The bond forms shall be provided by the Agency and the surety shall be acceptable to the Agency.



6. **WARRANTY:**

The successful bidder(s) shall be required to extend any policy guarantee usually offered to the general public, FEDERAL, STATE, COUNTY, or MUNICIPAL governments, on material in this contract against defective material, workmanship, and performance.

7. **THE CONTRACT(S):**

The contract(s) with the successful bidder(s) will be executed with the Department of Safety and Homeland Security acting for all participating agencies.

8. **RETURN OF BIDDER'S DEPOSIT:**

The deposits shall be returned to the successful bidder upon the execution of the formal contract. The deposits of unsuccessful bidders shall be returned to them immediately upon the awarding of the contract or rejection of their bids.

9. **INFORMATION REQUIREMENT:**

The successful bidder's shall be required to advise the Department of Safety and Homeland Security of the gross amount of purchases made as a result of the contract.

10. **CONTRACT EXTENSION:**

The State reserves the right to extend this contract on a month-to-month basis for a period of up to three months.

11. **TERMINATION FOR CONVENIENCE:**

Contracts shall remain in effect for the time period and quantity specified unless the contract is terminated by the State. The State may terminate the contract at any time by giving written notice of such termination and specifying the effective date thereof, at least sixty (60) days before the effective date of termination.

12. **TERMINATION FOR CAUSE:**

If, for any reasons, or through any cause, the Contractor fails to fulfill in timely and proper manner its obligations under this Contract, or if the Contractor violates any of the covenants, agreements, or stipulations of this Contract, the State shall thereupon have the right to terminate this contract by giving written notice to the Contractor of such termination and specifying the effective date thereof, at least 5 days before the effective date of such termination. In that event, all finished or unfinished documents, data, studies, surveys, drawings, maps, models, photographs, and reports or other material prepared by the Contractor under this Contract shall, at the option of the State, become its property, and the Contractor shall be entitled to receive just and equitable compensation for any satisfactory work completed on such documents and other materials which is usable to the State.

## **SECTION C - GENERAL**

### **1. AUTHORITY OF AGENCY:**

On all questions concerning the interpretation of specifications, the acceptability and quality of material furnished and/or work performed, the classification of material, the execution of the work, and the determination of payment due or to become due, the decision of the Agency shall be final and binding.

### **2. LAWS TO BE OBSERVED:**

The contractor is presumed to know and shall strictly comply with all National, State, or County laws, and City or Town ordinances and regulations in any manner affecting the conduct of the work. The contractor shall indemnify and save harmless the State of Delaware, the Agency, and all Officers, Agency and Servants thereof against any claim or liability arising from or based upon the violation of any such laws, ordinances, regulations, orders, or decrees whether by itself or by its employees.

### **3. PERMITS AND LICENSES:**

All necessary permits, licenses, insurance policies, etc. required by local, State or Federal laws, shall be provided by the contractor at its own expense.

### **4. PATENTED DEVICES, MATERIAL AND PROCESSES:**

- a. The contractor shall provide for the use of any patented design, device, material, or process to be used or furnished under this contract by suitable legal agreement with the patentee or owner, and shall file a copy of this agreement with the Agency.
- b. The contractor and the surety shall hold and save harmless the State of Delaware, the Agency, the Director, their Officers or Agents from any and all claims because of the use of such patented design, device, material, or process in connection with the work agreed to be performed under this contract.

### **5. EMERGENCY TERMINATION OF CONTRACT:**

- a. Due to restrictions which may be established by the United States Government on material, or work, a contract may be terminated by the cancellation of all or portions of the contract.
- b. In the event the contractor is unable to obtain the material required to complete the items of work included in the contract because of restrictions established by the United States Government and if, in the opinion of the Agency, it is impractical to substitute other available material, or the work cannot be completed within a reasonable time, the incomplete portions of the work may be cancelled, or the contract may be terminated.

6. **TAX EXEMPTION:**

- a. Material covered by this proposal is exempt from all FEDERAL and STATE TAXES. Such taxes shall not be included in prices quoted.
- b. Any material which is to be incorporated in the work or any equipment required for the work contemplated in the proposal may be consigned to the Agency. If the shipping papers show clearly that any such material is so consigned, the shipment will be exempt from the tax on the transportation of property under provisions of Section 3475 (b) of the Internal Revenue Code, as amended by Public Law 180 (78th Congress). All transportation charges shall be paid by the contractor. Each bidder shall take its exemption into account in calculating its bid for its work.

7. **OR EQUAL (PRODUCTS BY NAME):**

Specifications of products by name are intended to be descriptive of quality or workmanship, finish and performance. Desirable characteristics are not intended to be restrictive. Substitutions of products for those named will be considered provided the vendor certifies that the function, characteristics, performance and endurance qualities of the material offered is equal or superior to that specified.

8. **BID EVALUATION AND AWARD:**

The Department of Safety and Homeland Security will award this contract to the lowest responsible bidder(s) which in their judgment best serves the interest of the State of Delaware in accordance with Delaware Code Title 29, Section 6923(k). Personnel with experience and technical background may be utilized by the Department of Safety and Homeland Security in making judgment. In case of error in price extension, the unit price(s) shall prevail.

9. **INVOICING:**

After the awards are made, the agencies participating in the bid may forward their purchase orders to the successful bidder(s) in accordance with State Purchasing Procedures. The State will generate a payment voucher upon receipt of an invoice from the vendor.

## **SECTION D - EQUAL OPPORTUNITY**

### **1. EQUALITY OF EMPLOYMENT OPPORTUNITY ON PUBLIC WORKS:**

During the performance of any contract for public works financed in whole or in part by appropriation of the State of Delaware, the contractor agrees as follows:

- a. The contractor will not discriminate against any employee or applicant for employment because of race, creed, color, sex, age, or national origin. The contractor will take affirmative action to ensure that applicants are employed and that employees are treated equally during employment without regard to their race, creed, color, sex, age, or national origin. Such action shall include, but not be limited to the following: advertising, lay-off or termination, rates of pay or other forms of compensation, and selection for training including apprenticeships. The contractor agrees to post in conspicuous places, notices to be provided by the contracting agency setting forth the provisions of this non-discrimination clause.
- b. The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, creed, color, sex, age, or national origin.
- c. The term "contractor for public works" means construction, reconstruction, demolition, alteration, and/or repair work, maintenance work, and paid for in whole or in part out of the funds of a public body except work performed under a vocational rehabilitation program. The manufacture or furnishing of materials, articles, supplies or equipment is not a public work within the meaning of this subsection unless conducted in connection with and at the site of the public work.

Revised 7/1/2009

CONTRACT NO. SHS-11-002-CollapseRT  
Collapse Rescue Truck  
SPECIAL PROVISIONS

1. **CONTRACT REQUIREMENTS:**

This contract will be issued to cover the Collapse Rescue Truck requirements for

2. **CONTRACT PERIOD:**

Each vendor's contract shall be valid for one (1) year from the award date. Each contract may be renewed for one year at one-year increments through negotiation between the contractor and Department of Safety and Homeland Security. Negotiation must be initiated no later than ninety (90) days prior to the termination of the current agreement.

3. **PRICES:**

Prices shall remain firm for the term of the contract.

4. **MOST-FAVORED CUSTOMER:**

The contractor shall not offer to others prices lower than those provided in the contract, or if lower prices are offered they must also apply to the subject contract.

5. **PRICE ADJUSTMENT:**

If agreement is reached to extend this contract for the second, optional year, Department of Safety and Homeland Security shall have the option of offering a determined price adjustment and shall not exceed the current Philadelphia All Urban Consumers Price Index (CPI-U), U.S. City Average. If the CPI-U is used, any increase/decrease shall reflect the change during the previous published twelve (12) month period at the time of renegotiation.

STATE OF DELAWARE  
DEPARTMENT OF SAFETY AND HOMELAND SECURITY  
DELAWARE EMERGENCY MANAGEMENT AGENCY

6. **SHIPPING TERMS:**

F.O.B. destination; freight pre-paid.

7. **QUANTITIES:**

The attention of bidders is called to the fact that, unless stated otherwise, the quantities given in the proposal are best estimates and are given as a basis for the comparison of bids. Quantities ordered may be increased or decreased by any eligible agency as deemed necessary during the period of the contract.

8. **FUNDING OUT:**

The continuation of this contract is contingent upon funding appropriated by the legislature.

9. **BID BOND REQUIREMENT:**

A. Each bidder shall furnish a bond to the State of Delaware for the benefit of Department of Safety and Homeland Security in the amount equal to 10% of the respective bid value. The bond shall be drawn upon an insurance or bonding company authorized to do business in the State of Delaware. If the enclosed standard State of Delaware bond form is not used, the substitute bond must reflect the minimum conditions specified in the standard form. A certified check made out to Department of Safety and Homeland Security in an amount equal to 10% of the respective proposed value may be submitted in lieu of a proposal bond.

B. Bid Bond Waived.

10. **PERFORMANCE BOND REQUIREMENT:**

A. Contractors awarded contracts are required to furnish a 100% Performance Bond in accordance with Delaware Code Title 29, Section 6927, to the State of Delaware for the benefit of Department of Safety and Homeland Security with surety in the amount of 100% of the specific award. Said bonds shall be conditioned upon the faithful performance of the contract. This guarantee shall be submitted in the form of good and sufficient bond drawn upon an Insurance or Bonding Company authorized to do business in the State of Delaware. If State of Delaware, Office of Management and Budget bond form is not utilized, the substituted bond form must reflect the minimum conditions specified in State of Delaware, Office of Management and Budget Bond Form.

B. Performance Bond Waived

STATE OF DELAWARE  
DEPARTMENT OF SAFETY AND HOMELAND SECURITY  
DELAWARE EMERGENCY MANAGEMENT AGENCY

11. **MANDATORY INSURANCE REQUIREMENTS:**

A. Certificate of Insurance and/or copies of insurance policies for the following:

1. As a part of the contract requirements, the contractor must obtain at its own cost and expense and keep in force and effect during the term of this contract, including all extensions, the minimum coverage limits specified below with a carrier satisfactory to the State. All contractors must carry Comprehensive General Liability and at least one of the other coverages depending on the type of service or product being delivered.
  - a. Comprehensive General Liability - \$1,000,000.00 per person/\$3,000,000 per occurrence.
  - and
  - b. Medical/Professional Liability - \$1,000,000.00 per person/\$3,000,000 per occurrence.
  - or
  - c. Miscellaneous Errors and Omissions - \$1,000,000.00 per person/\$3,000,000 per occurrence.
  - or
  - d. Product Liability - \$1,000,000.00 per person/\$3,000,000 per occurrence.
2. Automotive Liability Insurance covering all automotive units used in the work with limits of not less than \$100,000 each person and \$300,000 each accident as to bodily injury and \$25,000 as to property damage to others.
3. Forty-five (45) days written notice of cancellation or material change of any policies is required.

**Contract No. SHS-11-002-CollapseRT  
State of Delaware  
Department of Safety and Homeland Security  
Central Fiscal Office  
303 Transportation Circle  
Dover, Delaware 19901**

**Note: The State of Delaware shall not be named as an additional insured.**

B. Certificate of Insurance Waived.

STATE OF DELAWARE  
DEPARTMENT OF SAFETY AND HOMELAND SECURITY  
DELAWARE EMERGENCY MANAGEMENT AGENCY

12. **BASIS OF AWARD:**

Department of Safety and Homeland Security shall award this contract to the lowest responsible and responsive bidder(s) who best meets the terms and conditions of the bid. The award will be made on basis of price, product evaluation, and prior history of service and capability.

Department of Safety and Homeland Security reserves the right to reject any or all bids in whole or in part, to make multiple awards, partial awards, award by types, item by item, or lump sum total, whichever may be most advantageous to the State of Delaware.

13. **STATE OF DELAWARE BUSINESS LICENSE:**

Prior to receiving an award, the successful vendor shall either furnish Department of Safety and Homeland Security with proof of State of Delaware Business Licensure or initiate the process of application where required. An application may be requested in writing to: Division of Revenue, Carvel State Building, P.O. Box 8750, 820 N. French Street, Wilmington, DE 19899 or by telephone to one of the following numbers: (302) 577-8201 - Public Service, (302) 577-8205 - Licensing Department.

Information regarding the award of this contract will be given to the Division of Revenue. Failure to comply with the State of Delaware licensing requirements may subject your organization to applicable fines and/or interest penalties.

14. **HOLD HARMLESS:**

The successful bidder agrees that it shall indemnify and hold the State of Delaware and all its agencies harmless from and against any and all claims for injury, loss of life, or damage to or loss of use of property caused or alleged to be caused, by acts or omissions of the successful bidder, its employees, and invitees on or about the premises and which arise out of the successful bidder's performance, or failure to perform as specified in the Agreement.

15. **OWNERSHIP OF INTELLECTUAL PROPERTY:**

All copyright and patent rights to all papers, reports, forms, materials, creations, or inventions created or developed in the performance of this contract shall become the sole property of the State of Delaware. On request, the contractor shall promptly provide an acknowledgment or assignment in a tangible form satisfactory to the State to evidence the State's sole ownership of specifically identified intellectual property created or developed in the performance of the contract.

16. **NON-PERFORMANCE:**

In the event the vendor does not fulfill its obligations under the terms and conditions of this contract, the ordering agency may purchase equivalent product on the open market. Any difference in cost between the contract prices herein and the price of open market product shall be the responsibility of the vendor. Under no circumstances shall monies be due the vendor in the event open market products can be obtained below contract cost. Any monies charged to the vendor may be deducted from an open invoice.



STATE OF DELAWARE  
DEPARTMENT OF SAFETY AND HOMELAND SECURITY  
DELAWARE EMERGENCY MANAGEMENT AGENCY

17. **FORCE MAJEURE:**

Neither the vendor nor the ordering agency shall be held liable for non-performance under the terms and conditions of this contract due, but not limited to, government restriction, strike, flood, fire, or unforeseen catastrophe beyond either party's control. Each party shall notify the other in writing of any situation that may prevent performance under the terms and conditions of this contract.

18. **CONTRACTOR NON-ENTITLEMENT:**

State of Delaware Contractors for Materiel and for Services shall not have legal entitlement to, nor seek business from another Contractors' Central Contract. Additionally, they shall not utilize other Central Contracts to fulfill the requirements of their respective contract as they are not a "Covered Agency" as defined by Title 29 Chapter 69 of the State Procurement Code.

19. **EXCEPTIONS:**

Bidders may elect to take minor exception to the terms and conditions of this ITB. Department of Safety and Homeland Security shall evaluate each exception according to the intent of the terms and conditions contained herein, but Department of Safety and Homeland Security must reject exceptions that do not conform to State bid law and/or create inequality in the treatment of bidders. Exceptions shall be considered only if they are submitted with the bid or before the date and time of the bid opening.

20. **MANDATORY USAGE REPORT:**

- A. One of the primary goals in administering this contract is to keep accurate records regarding its actual value. This information is essential in order to update the contents of the contract and to establish proper bonding levels if they are required. The integrity of future contracts revolves around our ability to convey accurate and realistic information to all interested bidders.

A report shall be furnished by the successful contractor **MONTHLY Electronically in Excel format** detailing the purchasing of all items on this contract. The format to be followed is described herein and shall be filed within fifteen (15) days after the end of each reporting period. Any exception to this mandatory requirement may result in cancellation of the award. Failure to provide the report with the minimum required information may also negate any contract extension clauses. Additionally, contractors who are determined to be in default of this mandatory report requirement may have such conduct considered against them, in assessment of responsibility, in the evaluation of future proposals. Vendors not having activity during a specific month, shall reply with a "no activity" if there is no activity during the reporting period.

**The report shall be submitted electronically in EXCEL and sent as an attachment to insert email. It shall contain the six-digit department and organization code.**

- B. If awarded as an agency contract the usage report will be waived.

Format of Report

State of Delaware  
Monthly Usage Report

State of Delaware									
Monthly Usage Report									
Supplier Name:				Insert Contract No.	Report Start Date:				
Contact Name:			Report End Date:						
Contact Phone:			Today's Date:						
Agency Name or School District	Division or Name of School	Budget Code	<a href="#">UNSPSC</a>	Item Description	Contract Item Number	Unit of Measure	Qty	Contract Proposal Price/Rate	Total Spend
									\$0.00
									\$0.00
									\$0.00
									\$0.00
									\$0.00
									\$0.00
									\$0.00
									\$0.00
									\$0.00
									\$0.00
									\$0.00
									\$0.00
									\$0.00

**Note:** A copy of the Usage Report will be sent by electronic mail to the Awarded Vendor.

The report shall be submitted electronically in **EXCEL** and sent as an attachment to Insert Information. It shall contain the six-digit department and organization code for each agency and school district.

STATE OF DELAWARE  
DEPARTMENT OF SAFETY AND HOMELAND SECURITY  
DELAWARE EMERGENCY MANAGEMENT AGENCY

21. **BUSINESS REFERENCES:**

In order to have your bid considered, please supply three (3) business references consisting of current or previous customers with your reply. Please include name, address, telephone number, and a contact person.

22. **ORDERING PROCEDURE:**

Successful contractors are required to have either a local telephone number within the (302) area code, a toll free (800) number, or agree to accept collect calls. Each agency is responsible for placing their orders and may be accomplished by written purchase order, telephone, fax or computer on-line systems. The contractor or vendor must accept full payment by procurement (credit) card and/or conventional check and/or other electronic means at the State's option, without imposing any additional fees, costs or conditions.

23. **BILLING:**

The successful vendor is required to **"Bill as Shipped"** to the respective ordering agency(s). Ordering agencies shall provide contract number, ship to and bill to address, contact name and phone number.

24. **PAYMENT:**

The agencies or school districts involved will authorize and process for payment each invoice within thirty (30) days after the date of receipt of a correct invoice. The contractor or vendor must accept full payment by procurement (credit) card and/or conventional check and/or other electronic means at the State's option, without imposing any additional fees, costs or conditions.

25. **PRODUCT SUBSTITUTION:**

All items delivered during the life of the contract shall be of the same type and manufacture as specified or accepted as part of the bid proposal unless specific approval is given by Department of Safety and Homeland Security to do otherwise. However, awarded vendors are highly encouraged to offer any like substitute product (s); either generic or brand name, at any time during the subsequent contract term, especially if an opportunity for cost savings to the state exists. In such cases, the state may require the submission of written specifications and/or product samples for evaluation prior to any approvals being granted.

26. **BID/CONTRACT EXECUTION:**

Both the non-collusion statement that is enclosed with this Invitation to Bid and the contract form delivered to the successful bidder for signature **shall** be executed by a representative who has the legal capacity to enter the organization into a formal contract with the State of Delaware, Department of Safety and Homeland Security. The awarded vendor(s) will be required to complete the new W-9 Form by visiting the Division of Accounting's Website: <http://accounting.delaware.gov> .

STATE OF DELAWARE  
DEPARTMENT OF SAFETY AND HOMELAND SECURITY  
DELAWARE EMERGENCY MANAGEMENT AGENCY

27. **CONTRACTOR RESPONSIBILITY:**

The State will enter into a contract with the successful contractor. The successful contractor shall be responsible for all products and services as required by this ITB. Subcontractors, if any, shall be clearly identified in the financial proposal.

28. **PERSONNEL:**

- a. The Contractor represents that they have, or will secure at their own expense, all personnel required to perform the services required under this contract.
- b. All of the services required hereunder shall be performed by the Contractor or under its direct supervision, and all personnel, including subcontractors, engaged in the work shall be fully qualified and shall be authorized under State and local law to perform such services.
- c. None of the work or services covered by this contract shall be subcontracted without the prior written approval of the State.

29. **LIFE CYCLE COSTING:**

If applicable, the specifications contained within this ITB have been developed through Life Cycle Cost Analysis that will allow the State to realize the lowest total cost of ownership and operation over the useful life of the equipment.

30. **ENERGY STAR PRODUCTS:**

The contractor **must** provide products that earn the ENERGY STAR rating and meet the ENERGY STAR specifications for energy efficiency. The offeror is encouraged to visit [www.energystar.gov](http://www.energystar.gov) for complete product specifications and updated lists of qualifying products.

31. **TERMINATION FOR CONVENIENCE:**

Contracts shall remain in effect for the time period and quantity specified unless the contract is terminated by the State. The State may terminate the contract at any time by giving written notice of such termination and specifying the effective date thereof, at least sixty (60) days before the effective date of termination.

STATE OF DELAWARE  
DEPARTMENT OF SAFETY AND HOMELAND SECURITY  
DELAWARE EMERGENCY MANAGEMENT AGENCY

32. **TERMINATION FOR CAUSE:**

If, for any reasons, or through any cause, the Contractor fails to fulfill in timely and proper manner its obligations under this Contract, or if the Contractor violates any of the covenants, agreements, or stipulations of this Contract, the State shall thereupon have the right to terminate this contract by giving written notice to the Contractor of such termination and specifying the effective date thereof, at least 5 days before the effective date of such termination. In that event, all finished or unfinished documents, data, studies, surveys, drawings, maps, models, photographs, and reports or other material prepared by the Contractor under this Contract shall, at the option of the State, become its property, and the Contractor shall be entitled to receive just and equitable compensation for any satisfactory work completed on such documents and other materials which is usable to the State.

33. **VENDOR EMERGENCY RESPONSE POINT OF CONTACT:**

The awarded vendor(s) shall provide the name(s), telephone, or cell phone number(s) of those individuals who can be contacted twenty four (24) hours a day, seven (7) days a week to meet a critical need for commodities or services when the Governor of the State of Delaware declares a state of emergency under the current Delaware Emergency Operations Plan. Failure to provide this information could render the bid as non-responsive.

34. **ELECTRONIC CATALOG:**

The successful vendor(s) may be required to submit their items list in electronic format designated by the State.

Note: The State of Delaware is in the process of implementing a new financials system, which will require the use of:

- Electronic catalogs
- Commodity/classification code: United Nations Standard Products and Services Code (UNSPSC).
- A unique item ID for all items in our system

The state has made the determination to include the requirement in this contract for two reasons:

1. To find out what vendors can offer.
2. To give the agencies and school districts a level of comfort in using electronic catalogs.

STATE OF DELAWARE  
DEPARTMENT OF SAFETY AND HOMELAND SECURITY  
DELAWARE EMERGENCY MANAGEMENT AGENCY

**TECHNICAL SPECIFICATIONS**

**SCOPE OF WORK  
FOR COLLAPSE RESCUE TRUCK**

The State of Delaware, Department of Safety and Homeland Security, Delaware Emergency Management Agency has the requirement for a multipurpose Collapse Rescue Truck. The successful bidder will order and provide on-site delivery to the Delaware Emergency Management Agency.

Item Number	DESCRIPTION Choose Yes or No to confirm you offer the specified item or note exceptions (attach separate sheet)	Yes	No	Exceptions
<b>1</b>	<b>MODEL</b>			
	The chassis shall be a Metro Star model or equivalent. The cab and chassis shall include design considerations for multiple emergency vehicle applications, rapid transit and maneuverability. The chassis shall be manufactured for heavy duty service with the strength and capacity to support a fully laden apparatus, one hundred (100) percent of the time.			
<b>2</b>	<b>MODEL YEAR</b>			
	The chassis shall have a vehicle identification number that reflects a 2011 model year.			
<b>3</b>	<b>COUNTRY OF SERVICE</b>			
	The chassis shall be put in service in the country of United States of America.			
<b>4</b>	<b>APPARATUS TYPE</b>			
	The apparatus shall be a rescue vehicle designed for emergency service use which shall include the functions of a multipurpose vehicle which primarily provides support services at emergency scenes.			
<b>5</b>	<b>VEHICLE TYPE</b>			
	The chassis shall be manufactured for use as a tractor type vehicle, designed to accept a trailer though the use of a fifth wheel hitch (trailer supplied/installed by others).			
<b>6</b>	<b>AXLE CONFIGURATION</b>			
	The chassis shall feature a 4 by 2 axle configuration consisting of a single rear drive axle with a single front steer axle.			
<b>7</b>	<b>GROSS AXLE WEIGHT RATINGS FRONT</b>			
	The front gross axle weight rating (GAWR) of the chassis shall be 14,600 pounds. This front gross axle weight rating shall be adequate to carry the weight of the completed apparatus including all equipment and personnel.			
<b>8</b>	<b>GROSS AXLE WEIGHT RATINGS REAR</b>			
	The rear gross axle weight rating (GAWR) of the chassis shall be 24,000 pounds. This rear gross axle weight rating shall be adequate to carry the weight of the completed apparatus including all equipment and personnel.			

<b>9</b>	<b>GROSS COMBINATION WEIGHT RATING</b>			
The gross combination weight rating (GCWR) shall be 67,000 lbs. The sum of the gross weight of the vehicle and the gross weight of the trailer intended to be towed shall not exceed this GCWR.				
<b>10</b>	<b>CAB STYLE/CONSTRUCTION QUALITY</b>			
<p>The cab shall be a custom, enclosed model, modular design, built specifically for the fire service by a company specializing in cab and chassis design. The modular design shall allow for faster, less costly replacement of components and maintenance.</p> <ul style="list-style-type: none"> <li>- The cab shall be constructed of 5052-H32, 100% primary aluminum plate. The cab shall be manufactured for heavy-duty service providing superior strength and capacity for protecting firefighters. The "A" pillar shall be manufactured from 6061-T6 grade aluminum, single formed one piece extrusion, 100 % primary metal, 0.25 inch thick for strength, rigidity and improved cab roll-over protection. The cab side wall skins shall be 0.125 inch thick, the rear wall and roof skin shall be 0.19 inch thick, and the front skin shall be 0.125 inch thick. The cab shall incorporate tongue and groove fitted 6061-T6 aluminum extrusions, 0.25 inch thick, for extreme duty use. <b>PROPOSALS OFFERING PRODUCTS BUILT WITH MATERIALS INFERIOR TO THE ALLOY-TEMPERS MENTIONED SHALL NOT BE CONSIDERED. ADDITIONALLY, ANY CAB UTILIZING RECYCLED OR RECOVERED ALUMINUM PLATE OR EXTRUSION PRODUCTS SHALL NOT BE CONSIDERED DUE TO EXTANT IMPURITIES LEADING TO A POSSIBLE COMPROMISE OF STRENGTH.</b></li> </ul>				
<b>11</b>	<b>CAB CONSTRUCTION STANDARDS</b>			
The method of cab construction shall use a process incorporating techniques outlined in accordance with the American Welding Society <b>D1.1-96</b> requirements for structural steel welding. All aluminum welding shall be completed to the American Welding Society <b>D1.2-96</b> and ANSI requirements for structural welding of aluminum.				
<b>12</b>	<b>USE OF ADHESIVES</b>			
To reduce the amount of welds the roof, rear wall and side panels shall be assembled using proven industrial adhesives, designed specifically for aluminum fabrication. The adhesive material shall exceed the strength of a mechanical weld for construction. All interior and exterior seams shall be sealed for optimum noise reduction. A multi-layer composite insulation material shall be included in the interior for retention/efficiency of heating and cooling and additional noise reduction.				
<b>13</b>	<b>CAB DESIGN AND DIMENSIONS</b>			
The cab shall incorporate a fully enclosed design, allowing for a spacious area with no partition between the front and rear sections of the cab. The walls of the vehicle shall include roof supports allowing for an open design. The outside dimension of the cab shall be 94.00 inches wide with a minimum interior width of 88.00 inches. The cab overall length shall be 128.00 inches with 54.00 inches from the centerline of the front axle to the back of the cab. Minimum floor to headliner heights shall be 58.00 inches in the front and 65.00 inches in the rear. All interior measurements shall include the area within the interior trimmed surfaces.				

<b>14</b>	<b>CAB ENTRY DOORS</b>			
<p>The cab shall include four (4) entry doors, two (2) front doors and two (2) crew doors as high as possible for ease of entering and egress when outfitted with an SCBA. The forward cab shall include a driver and officer area. The front doors shall offer a clear opening of 40.00 inches wide by 53.50 inches high. The cab shall also include a rear crew area with two (2) doors. The rear doors shall offer a clear opening of 31.00 inches wide by 61.00 inches high. The cab shall provide up to eight (8) seating positions.</p> <p>The doors shall be full height and constructed of extruded aluminum with a nominal thickness of .125 inch. The exterior skins shall be constructed of a minimum 0.125 inch aluminum plate. All cab and crew doors shall be of substantial weight for the optimum strength and rigidity for the best performance in all cab crash testing. Any cab with front and crew doors manufactured of less than the material thickness of .125 inch in both the extrusion and exterior skin shall not be considered. The doors shall include a double rolled style automotive rubber seal around the perimeter of each door frame and door edge which ensures a weather tight fit.</p>				
<b>15</b>	<b>DOOR HINGES</b>			
<p>All door hinges shall be hidden within flush mounted cab doors for a smooth appearance and perfect fit along each side of the cab. Each door hinge shall be piano style with a 0.38 inch pin and shall be constructed of stainless steel. Proposals offering door hinge thickness any less than stated shall not be considered. Proposals including doors that do not comply with the flush mounting as described or those including exposed hinges shall not be considered.</p>				
<b>16</b>	<b>CAB ENTRY DOOR/STEP TYPE</b>			
<p>All cab entry doors shall be full length in design to fully enclose the lower cab steps. The cab shall incorporate a two (2) step configuration from the ground to the cab floor for each door opening. The lower step shall be constructed of heavy duty safety grating with open drainage which meets or exceeds Federal Specification RRG-1602-latest revision and performs under dry, greasy, muddy, soapy and icy conditions. The first step for the front doors (driver and officer area) shall measure 11.44 inches deep by 31.13 inches wide. The intermediate step shall measure 8.75 inches deep by 33.00 inches wide. The height from the first step to the intermediate step and the intermediate step to the cab floor shall not exceed 11.00 inches. The first step for the crew area shall measure 12.13 inches deep by 20.44 inches wide. The intermediate step shall measure 10.50 inches deep by 23.00 inches wide. The height from the first step to the intermediate step and the intermediate step to the cab floor shall not exceed 12.50 inches.</p>				
<b>17</b>	<b>CAB FASCIA</b>			
<p>The cab fascia shall be constructed of 5052-H32, 0.125 inch thick, 100% primary aluminum plate which shall be an integral part of the cab. The cab fascia will encompass the entire front of the aluminum cab structure from the bottom of the windshield to the bottom of the cab. The front shall include two (2) molded plastic modules on each side accommodating a total of up to four (4) Hi/Low beam headlights and two (2) turn signal lights or up to four (4) warning lights. A chrome plated molded plastic bezel shall be provided on each side around each set of four lamps.</p>				
<b>18</b>	<b>FRONT GRILLE</b>			
<p>The front shall include a box style, stainless steel front grille 44.45 inches wide by 33.50 inches high by 1.50 inches deep or similar. The grille shall include a</p>				



minimum free air intake of 732.00 square inches.				
<b>19</b>	<b>CAB UNDERCOAT</b>			
There shall be a rubber undercoating applied to the underside of the cab that provides abrasion protection, sound deadening and corrosion protection.				
<b>20</b>	<b>CAB PAINT EXTERIOR</b>			
The cab shall be painted prior to the installation of glass accessories and all other cab trim to ensure complete paint coverage and the maximum in corrosion protection of all metal surfaces. All metal surfaces on the entire cab shall be ground to remove any surface oxidation or debris which may hinder the paint adhesion. Once the surface is machine ground, a high quality acid etching base primer shall be applied. Upon the application of body fillers and their preparation, the cab shall be primed with a coating designed for corrosion resistance and surface paint adhesion. The maximum thickness of the primer coat shall be approximately 2.00 mils. The entire cab shall then be coated with an intermediate solid or epoxy surfacing agent that is designed to fill any minor surface defects, provide an adhesive bond between the primer and the paint and improve the color and gloss retention of the color. The cab shall be sanded, seams shall be sealed with SEM brand or similar seam sealer and painted with two (2) to four (4) coats of an acrylic urethane material designed to retain color and resist acid rain and most atmospheric chemicals found on the fire ground or emergency scene. The cab shall then be painted with the specific customer designated color. A minimum paint thickness of 2.00 mils shall be followed by a 2.00 mils clear top coat.				
<b>21</b>	<b>CAB PAINT MANUFACTURER</b>			
The cab shall be painted with PPG Industries paint or similar, high quality, industrial grade supplier.				
<b>22</b>	<b>CAB PAINT PRIMARY/LOWER COLOR</b>			
The lower paint color shall be PPG FBCH 71663 Red or similar.				
<b>23</b>	<b>CAB PAINT INTERIOR</b>			
The visible cab structure surfaces shall be painted with a Zolatone or similar #20-72 silver gray texture finish.				
<b>24</b>	<b>CAB ENGINE TUNNEL</b>			
The cab interior shall include an integrated engine tunnel constructed of 5052-H32, 0.190 inch aluminum alloy plate. The tunnel shall be a maximum of 41.50 inches wide by 25.50 inches high.				
<b>25</b>	<b>CAB TEST INFORMATION</b>			
The cab shall have successfully achieved survival of the International crash test ECE-R29, Addendum –28, Revision 1 standards as indicated below. It shall also meet SAE J2420 COE Frontal Strength, Evaluation Dynamic Loading Heavy Trucks and SAE J2422 Cab Roof Strength Quasi-Static Roof Load test requirements.				
The cab shall be so constructed that after the test, there will be minimal intrusion of the cab structure into the passenger area. The doors shall remain usable for both entry and exit. Also, as part of the test the cab roof must withstand a static load bearing test. The cab shall withstand a weight of over 60,000 pounds without permanent damage or collapse.				

The above tests shall be witnessed by and attested to by an independent third party. The test results shall be recorded on/by cameras, high speed imagers, accelerometers and strain gauges. Documentation of the testing shall be provided upon request.				
<b>26</b>	<b>ELECTRICAL SYSTEM</b>			
The chassis shall include a single starting electrical system which shall include a 12 volt direct current system, suppressed per SAE J551. The wiring shall be appropriate gauge cross link with 311 degree Fahrenheit insulation. All SAE wires in the chassis shall be color coded and shall include the circuit number and function where possible. The wiring shall be protected by 275 degree Fahrenheit minimum high temperature flame retardant loom.				
<b>27</b>	<b>TRAILER ELECTRICAL CONNECTION</b>			
A seven (7) point round electrical trailer connection shall be provided with the chassis. The wiring shall include a ground wire; wiring for marker lights which shall be black; left turn signal wiring which shall be yellow, wiring for stop lights which shall be red; right turn signal wiring which shall be green, additional marker lights which shall be brown and ABS brake power.				
<b>28</b>	<b>LOAD MANAGEMENT SYSTEM</b>			
The vehicle shall be equipped with a Class 1 Total System Manager (TSM) for performing electrical load management. The TSM shall have sixteen (16) programmable outputs to supply warning and load switching requirements. Outputs one (1) through twelve (12) shall be independently programmable to activate during the scene mode, the response mode, or both. These outputs shall also be programmable to activate with the ignition or master warning switch, or to sequence and shed according to the set priority. Output thirteen (13) shall be designated to activate a fast idle system. Output fourteen (14) shall provide a low voltage warning for an isolated battery. Output fifteen (15) is a user configurable output and shall be programmable for activating between 10.50 and 15.00 volts. Output sixteen (16) shall provide a low voltage alarm that activates at the NFPA required 11.80 volts. The TSM shall have a digital display to indicate system voltage in normal operation mode and also indicate the output configuration during programming mode. The TSM shall be protected against reverse polarity and shorted outputs and enclosed in a metal enclosure to enhance (EMI/RFI) protection.				
<b>29</b>	<b>DATA RECORDING SYSTEM</b>			
<p>The chassis shall have a Class One Vehicle Data Recorder (VDR) system installed. The system shall be designed to meet NFPA 1901. The following information shall be recorded:</p> <ul style="list-style-type: none"> <li>• Vehicle Speed</li> <li>• Acceleration</li> <li>• Deceleration</li> <li>• Engine Speed</li> <li>• Engine Throttle Position</li> <li>• ABS Event</li> <li>• Seat Occupied Status</li> <li>• Seat Belt Status</li> <li>• Master Optical Warning Device Switch Position</li> <li>• Time</li> <li>• Date</li> </ul> <p>Each portion of the data shall be recorded at specified intervals and stored for the length of time to meet NFPA 1901 guidelines and shall be retrievable by</p>				

connection to a laptop computer.				
<b>30</b>	<b>POWER &amp; GROUND STUD</b>			
The electrical distribution panel shall include two (2) power studs, size #10 and each shall be fuse protected. One (1) power stud shall be rated to a 40 amp battery direct load. One (1) power stud shall be rated to a 15 amp ignition switched load. The two (2) power studs shall share one (1) #10 ground stud that shall be 0.38 inch diameter.				
<b>31</b>	<b>AUXILIARY POWER &amp; GROUND STUD</b>			
An auxiliary set of power and ground studs shall be provided and installed in the driver side under seat storage compartment. The power studs shall be circuit protected with a 40 amp breaker. The studs shall be 0.375 inch diameter and be capable of carrying up to a 40 amp battery direct load.				
<b>32</b>	<b>EXTERIOR ELECTRICAL TERMINAL COATING</b>			
All terminals exposed to the elements will be sprayed with a yellow protective rubberized coating to prevent corrosion.				
<b>33</b>	<b>ENGINE</b>			
<p>The engine shall be a 506 CID, turbo charged, diesel Cummins model ISC 380 or similar. The engine shall have a rating of 380 horse power at 2000 RPM which shall be governed at 2200 RPM. The engine shall produce 1050 foot pounds of torque at 1400 RPM. The engine shall be an in-line six (6) cylinder, four cycle engine. The engine shall feature an electronic governor, a high pressure common rail fuel system, and fully integrated electronic controls. This system shall be coupled with a variable geometry turbocharger which delivers maximum performance ratings up to 380 HP. The engine shall include replaceable wet liners plus heavy duty roller followers, and targeted piston cooling.</p> <p>The engine shall include a combination full flow/by-pass oil filter with replaceable spin on cartridge for the lubrication system. The engine shall include Citgo brand Citgard, 500 or equivalent, SAE 15W40, CJ4 low ash engine oil for proper engine lubrication. The engine shall be EPA certified to meet the 2010 emissions standards without compromising performance, reliability or durability using cooled exhaust gas recirculation and selective catalytic reduction technology.</p> <p>A wiring harness shall be supplied ending at the back of the cab. The harness shall include a connector which shall allow an optional harness for the pump panel. The included circuits shall be provided for a tachometer, oil pressure, engine temperature, hand throttle, high idle and a PSG system. A circuit for J1939 data link shall also be provided at the back of the cab. The engine ECM (Electronic Control Module) discreet wire remote throttle circuit shall be turned off for use with a J1939 based pump controller or when the discreet wire remote throttle controls are not required.</p>				
<b>34</b>	<b>DIESEL PARTICULATE FILTER CONTROLS</b>			
There shall be two (2) controls for the diesel particulate filter. One (1) control shall be for regeneration and one (1) control shall be for regeneration inhibit.				
<b>35</b>	<b>ENGINE PROGRAMMING IDLE SPEED</b>			
The engine high idle control shall maintain the engine idle at approximately 1250 RPM when engaged. The engine low idle speed will be programmed at 700 rpm.				
<b>36</b>	<b>ENGINE HIGH IDLE CONTROL</b>			
The vehicle shall be equipped with an automatic high-idle speed control which shall be pre-set to operate when the engine is at a specified RPM to increase				

alternator output. This device shall operate only when the master switch is activated and the transmission is in neutral with the parking brake set. The device shall disengage when the operator depresses the brake pedal, or the transmission is placed in gear, and shall automatically re-engage when the brake is released, or when the transmission is placed in neutral.				
<b>37</b>	<b>ENGINE PROGRAMMING ROAD SPEED GOVERNOR</b>			
The engine shall include programming which will govern the top speed of the vehicle.				
<b>38</b>	<b>AUXILIARY ENGINE BRAKE</b>			
The engine shall utilize a variable geometry turbo (VGT). The VGT auxiliary engine brake shall be an integral part of the turbo system and shall offer a variable rate of exhaust flow, which when activated shall slow the engine and in turn slow the vehicle. The VGT shall actuate the vehicle's brake lights when engaged as an auxiliary brake. A cutout relay shall be installed to disable the VGT when in pump mode or when an ABS event occurs. The VGT engine brake shall activate at a 0% accelerator throttle position when in operation mode.				
<b>39</b>	<b>AUXILIARY ENGINE BRAKE CONTROL</b>			
<p>An electronic control device shall monitor various conditions and shall activate the engine brake only if all of the following conditions are simultaneously detected:</p> <ul style="list-style-type: none"> <li>• A valid gear ratio is detected.</li> <li>• The driver has requested or enabled engine compression brake operation.</li> <li>• The throttle is at a minimum engine speed position.</li> <li>• The electronic controller is not presently attempting to execute an electronically controlled final drive gear shift. The variable geometry turbo brake control shall be controlled through an on/off rocker switch.</li> </ul>				
<b>40</b>	<b>ELECTRONIC ENGINE OIL LEVEL INDICATOR</b>			
The engine oil shall be monitored electronically and shall send a signal to activate a warning in the instrument panel when levels fall below normal. The warning shall activate in a low oil situation upon turning on the master battery and ignition switches without the engine running.				
<b>41</b>	<b>ENGINE FAN DRIVE</b>			
The engine cooling system shall incorporate a thermostatically controlled, Horton clutched type fan drive. When the clutched fan is disengaged it shall facilitate improved vehicle performance, cab heating in cold climates, and fuel economy. The fan clutch design shall be fail safe so that if the clutch drive fails the fan shall engage to prevent engine overheating due to the fan clutch failure.				
<b>42</b>	<b>ENGINE COOLING SYSTEM</b>			
<p>The system shall include a heavy-duty aluminum cooling system designed to meet the demands of the emergency response industry. The cooling system shall have the capacity to keep the engine properly cooled under all conditions of road and pumping operations. The cooling system shall be designed and tested to meet or exceed the requirements specified by the engine and transmission manufacturer and all EPA requirements. The complete cooling system shall be mounted to isolate the entire system from vibration or stress. The individual cores of the cooling system shall be mounted in a manner to allow expansion and contraction at various rates without inducing stress into the adjoining cores.</p> <p>The cooling system shall be comprised of a charge air cooler to radiator serial flow package that provides the maximum cooling capacity for the specified engine as well as serviceability. The main components shall include a surge tank, a</p>				

charge air cooler bolted to the front of the radiator, recirculation shields, a shroud, a fan, and required tubing.

The radiator shall be a down-flow design constructed with aluminum cores, plastic end tanks, and a steel frame. The radiator shall be equipped with a drain cock to drain the coolant for serviceability. The cooling system shall include a one piece injected molded polymer eleven (11) blade fan with a fiberglass fan shroud.

The cooling system shall be equipped with a surge tank that is capable of removing entrained air from the system. The surge tank shall be equipped with a low coolant probe and sight glass to monitor the level of the coolant. The surge tank shall have a dual seal cap that meets the engine manufacturer's pressure requirements, and allows for expansion and recovery of coolant to a separate tank.

All radiator tubes shall be formed from aluminized steel tubing. Recirculation shields shall be installed where required to prevent heated air from reentering the cooling package and affecting performance. The charge air cooler shall be a cross-flow design constructed completely of aluminum with cast tanks. All charge air cooler tubes shall be formed from aluminized steel tubing and installed with silicone hump hoses and stainless steel "constant torque" style clamps meeting the engine manufacturer's requirements.

<b>43</b>	<b>SKIDPLATE</b>			
The engine cooling system shall include a recirculation shield that shall act as a skid plate below the radiator to provide additional protection for the cooling system.				
<b>44</b>	<b>ENGINE COOLANT</b>			
The cooling package shall include Extended Life Coolant (ELC) in a 50/50 mix of ethylene glycol and de-ionized water to prevent freezing to a temperature of -34 degrees F. Supplemental coolant additives (SCA) shall not be considered.				
<b>45</b>	<b>ELECTRONIC COOLANT LEVEL INDICATOR</b>			
The instrument panel shall feature a low engine coolant indicator light which shall be located in the center of the instrument panel. An audible tone alarm shall also be provided to warn of a low coolant incident.				
<b>46</b>	<b>COOLANT HOSES</b>			
The cooling systems hose shall be formed silicone hose and formed aluminized steel tubing and include stainless steel constant torque band clamps.				
<b>47</b>	<b>ENGINE AIR INTAKE</b>			
<p>The engine air intake system shall include an ember separator air intake filter which shall be located in the front of the cab behind the officer side fascia. This filter shall protect the downstream air filter from embers using a combination of unique flat and crimped metal screens constructed into a galvanized steel frame. This multilayered screen shall be designed to trap embers or allow them to burn out before passing through the pack, while creating only minimal air flow restriction through the system. Periodic cleaning or replacement of the screen shall be all that is required after installation.</p> <p>The engine shall also include an air intake filter which shall be bolted to the frame and located under the front of the cab on the officer side. The dry type filter shall ensure dust and debris safely contained inside the disposable housing, eliminating the chance of contaminating the air intake system during air filter</p>				

<p>service via a leak-tight seal.</p> <p>The air flow distribution and dust loading shall be uniform throughout the high-performance filter cone pack, which shall result in pressure differential for improved horsepower and fuel economy. The air intake shall be mounted within easy access via a hinged panel behind the headlight module. The air intake system shall include a restriction indicator light in the warning light cluster on the instrument panel, which shall activate when the air cleaner element requires replacement.</p>				
<b>48</b>	<b>ENGINE EXHAUST SYSTEM</b>			
<p>The exhaust system shall include a diesel particulate filter, a diesel oxidation catalyst, and a selective catalytic reduction catalyst to meet current EPA standards. The selective catalytic reduction catalyst utilizes a diesel exhaust fluid solution consisting of urea and purified water to convert NOx into nitrogen, water, and trace amounts of carbon dioxide.</p> <p>The system shall utilize 0.065 inch thick stainless steel exhaust tubing between the engine turbo and the diesel particulate filter. This section of the exhaust system shall be wrapped with a thermal cover in order to retain the necessary heat for system regeneration. Zero leak clamps seal all system joints between the turbo and diesel particulate filter.</p> <p>From the diesel particulate filter to the end of the tailpipe the system shall be plumbed with 0.065 inch thick aluminized steel tubing connected with overlapping band style clamps. The discharge shall terminate horizontally on the officer side of the vehicle ahead of the rear tires.</p> <p>The exhaust system shall be mounted below the frame with the selective catalytic reduction catalyst stacked outboard of the diesel particulate filter.</p>				
<b>49</b>	<b>DIESEL EXHAUST FLUID TANK</b>			
<p>The exhaust system shall include a molded cross linked polyethylene tank integrated into the battery tray for diesel exhaust fluid. The tank shall have a capacity of 6.00 usable gallons and shall be mounted on the LH side of the chassis frame. The tank fill tube shall be routed under the rear of the cab with the fill neck and splash guard accessible in the top rear step.</p>				
<b>50</b>	<b>ENGINE EXHAUST ACCESSORIES</b>			
<ul style="list-style-type: none"> <li>-An exhaust temperature mitigation device shall to lower the temperature of the exhaust by combining ambient air with the exhaust gasses at the exhaust outlet.</li> <li>- Engine exhaust wrap shall be insulated wrap to protect the surrounding components from any radiant heat which might be transferred from the exhaust.</li> </ul>				
<b>51</b>	<b>TRANSMISSION</b>			
<p>The drive train shall include an Allison Gen IV-E model EVS 3000 torque converting, automatic transmission which shall include electronic controls. The transmission shall feature two (2) 10-bolt PTO pads located on the converter housing. The transmission shall include two (2) internal oil filters and Castrol TranSynd™ synthetic TES 295 transmission fluid. An electronic oil level sensor shall be included with the readout located in the shift selector. The Gen IV-E transmission shall include prognostic diagnostic capabilities. These capabilities shall include the monitoring of the fluid life, filter change indication, and transmission clutch maintenance.</p> <p>The transmission gear ratios shall be:</p>				

1st 3.49:1 2nd 1.86:1 3rd 1.41:1 4th 1.00:1 5th 0.75:1 6th 0.65:1 (if applicable) Rev 5.03:1				
<b>52</b>	<b>TRANSMISSION MODE PROGRAMMING</b>			
The transmission, upon start-up, will select a six (6) speed operation without the need to press the mode button.				
<b>53</b>	<b>TRANSMISSION FEATURE PROGRAMMING</b>			
The EVS group package number 127 shall contain the 199 vocational package in consideration of the duty of this apparatus for rescue. This package shall incorporate an automatic neutral with selector override. This feature commands the transmission to neutral when the park brake is applied, regardless of drive range requested on the shift selector. This requires re-selecting drive range to shift out of neutral for the override. An eight (8) pin Delphi connector will be provided next to the steering column connector. This will contain the following input/output circuits to the transmission control module: Function ID Description Wire assignment C PTO Request 143 F Aux. Function Range Inhibit (Special) 101/142 G PTO Enable Output (See Input Function C) 130 S Neutral Indicator for PTO 145 Signal Return 103				
<b>54</b>	<b>ELECTRONIC TRANSMISSION OIL LEVEL INDICATOR</b>			
The transmission fluid shall be monitored electronically and shall send a signal to activate a warning in the instrument panel when levels fall below normal.				
<b>55</b>	<b>TRANSMISSION SHIFT SELECTOR</b>			
An Allison pressure sensitive range selector touch pad shall be provided and located to the right of the driver within clear view and easy reach. The shift selector shall provide a prognostic indicator (wrench symbol) on the digital display between the selected and attained indicators. The prognostics monitor various operating parameters to determine and shall alert you when a specific maintenance function is required.				
<b>56</b>	<b>TRANSMISSION PRE-SELECT WITH AUXILIARY BRAKE</b>			
When the auxiliary brake is engaged, the transmission shall automatically shift to second gear to decrease the rate of speed assisting the secondary braking system and slowing the vehicle.				
<b>57</b>	<b>TRANSMISSION COOLING SYSTEM</b>			
The transmission shall include a water to oil cooler system located in the cooling loop between the radiator and the engine. The transmission cooling system shall meet all transmission manufacturer requirements. The transmission cooling system shall feature continuous flow of engine bypass water to maintain uninterrupted transmission cooling.				

<b>58</b>	<b>LEFT HAND POWER TAKE OFF</b>			
A ten (10) bolt Chelsea model 277-XDFJP-B5RA heavy duty transmission driven PTO or similar shall be installed. The clutched shifted PTO shall be designed specifically for the Allison world transmission and provide torque ranges from 250 to 335 lb. ft. Installation shall include mounting of the PTO and wiring the unit with a control switch. The transmission PTO shall be mounted in the 9:00 o'clock position.				
<b>59</b>	<b>PTO CONTROL</b>			
<p>The left hand power take off shall be controlled by the transmission. The power take off shall be activated by an on/off rocker switch which contains an integral light which shall illuminate upon a positive engagement of the power take off. This switch shall be located on dash. Required operating conditions for enabling this function are:</p> <ul style="list-style-type: none"> <li>• Throttle position is low</li> <li>• Engine speed is within customer modifiable constant limits</li> <li>• Output speed is within customer modifiable constant limits park brake set</li> </ul>				
<b>60</b>	<b>DRIVE LINE</b>			
All drivelines shall be heavy duty metal tube and equipped with Spicer 1710 or similar series universal joints. The shafts shall be dynamically balanced prior to installation to alleviate future vibration. In areas of the driveline where a slip shaft is required, the splined slip joint shall be coated with "Glide Coat" or similar.				
<b>61</b>	<b>FUEL FILTER/WATER SEPARATOR</b>			
The fuel system shall have a Fleetguard or similar FS1003 fuel filter/water separator as a primary filter. The fuel filter shall have a drain valve. A "water in fuel" sensor shall be provided and wired to an instrument panel lamp and audible alarm to indicate when water is present in the fuel/water separator. A secondary approved fuel filter shall be included.				
<b>62</b>	<b>FUEL LINES</b>			
The fuel system lines shall be brown reinforced nylon tubing rated for diesel fuel with brass fittings installed from the tank to engine including the return.				
<b>63</b>	<b>FUEL SHUTOFF VALVE</b>			
A fuel shutoff valve shall be installed in the fuel draw line at the primary fuel filter to allow the fuel filter to be changed without loss of fuel to the fuel pump. A second fuel shutoff valve shall be installed in the fuel draw line, near the fuel tank to allow maintenance to be performed with minimal loss of fuel.				
<b>64</b>	<b>FUEL TANK</b>			
The fuel tank shall have a capacity of sixty-eight (68) gallons and shall measure 35.00 inches wide by 17.00 inches in height by 29.00 inches in length. The baffled tank shall be made of 14 gauge aluminized steel. The exterior of the tank shall be painted with a PRP Corsol, or similar, black anti-corrosive exterior metal treatment finish. This results in a tank which offers the internal and external corrosion resistance. The tank shall have a vent port to facilitate venting to the top of the fill neck for rapid filling without "blow-back" and a roll over ball check vent for temperature related fuel expansion and draw. The tank is designed with dual draw tubes and sender flanges. The tank shall have 2.00 inch NPT fill ports for right or left hand fill. A 0.50 inch NPT drain plug shall be centered in the bottom of the tank. The fuel tank shall be mounted below the frame, behind the rear axle. Two (2) three-piece strap hanger assemblies with "U" straps bolted midway on the fuel tank front and rear shall be utilized to allow the tank to be easily lowered and removed for service purposes. Rubber isolating pads shall be				



provided between the tank and the hanger strap assemblies. Strap mounting studs through the rail, hidden behind the body shall not be accepted.				
<b>65</b>	<b>FUEL TANK FILL PORT</b>			
The fuel tank fill ports shall be provided with the right fill port located in the middle position and the left fill ports located one (1) in the forward position and one (1) in the middle position of the fuel tank.				
<b>66</b>	<b>FRONT WHEEL BEARING LUBRICATION</b>			
The front axle wheel bearings shall be lubricated with oil. The oil level can be visually checked via clear inspection windows in the front axle hubs.				
<b>67</b>	<b>FRONT SHOCK ABSORBERS</b>			
Two (2) Bilstein, or similar, inert, nitrogen gas filled shock absorbers shall be provided and installed as part of the front suspension system. The shocks shall be a monotubular design and fabricated using a special extrusion method, utilizing a single blank of steel without a welded seam, achieving an extremely tight peak-to-valley tolerance and maintains consistent wall thickness. The monotubular design shall provide superior strength while maximizing heat dissipation and shock life. The Bilstein front shocks shall include a digressive working piston assembly allowing independent tuning of the compression and rebound damping forces to provide optimum ride and comfort. The working piston design shall feature fewer parts than most conventional twin tube and "road sensing" shock designs and shall contribute to the durability and long life of the Bilstein shock absorbers. Conventional twin tube or "road sensing" designed shocks shall not be considered.				
<b>68</b>	<b>FRONT SUSPENSION</b>			
The front suspension shall include four (4), 54.00 inch long and 4.00 inch wide taper leaf springs with a military double wrapped front eye. Both spring eyes shall have a case hardened threaded bushing installed with lubrication counter bore and lubrication land off cross bore with grease fitting. The spring capacity shall be rated at 18,000 pounds.				
<b>69</b>	<b>STEERING COLUMN/ WHEEL</b>			
The cab shall include a Douglas Autotech or similar steering column which shall include a seven (7) position tilt, a 2.25 inch telescopic adjustment, and an 18.00 inch, two (2) spoke steering wheel located at the driver's position. The steering wheel shall be covered with black polyurethane foam padding. The steering column shall contain a horn button, self-canceling turn signal switch, four-way hazard switch and headlamp dimmer switch.				
<b>70</b>	<b>POWER STEERING PUMP</b>			
The hydraulic power steering pump shall be a TRW PS and shall be gear driven from the engine. The pump shall be a balanced, positive displacement, sliding vane type.				
<b>71</b>	<b>ELECTRONIC POWER STEERING FLUID LEVEL INDICATOR</b>			
The power steering fluid shall be monitored electronically and shall send a signal to activate an audible alarm and visual warning in the instrument panel when fluid level falls below normal.				
<b>72</b>	<b>FRONT AXLE CRAMP ANGLE</b>			
The chassis shall have a front axle cramp angle of 50 degrees to the left and right.				

<b>73</b>	<b>POWER STEERING GEAR</b>			
The power steering gear shall be a TRW model TAS 65.				
<b>74</b>	<b>CHASSIS ALIGNMENT</b>			
The chassis frame rails shall be measured to insure the length is correct and cross checked to make sure they run parallel and are square to each other. The front and rear axles shall be laser aligned. The front tires and wheels shall be aligned and toe-in set on the front tires by the chassis manufacturer. The completed apparatus shall be rechecked for proper alignment once the chassis has been fully loaded and before being placed in service.				
<b>75</b>	<b>REAR AXLE</b>			
The rear axle shall be similar to a Meritor model number RS-24-160. The axle shall include rectangular shaped, hot-formed housings. The axles shall include torsion flow axle shafts that feature a surface hardness which resists fatigue and a resilient core which absorbs shock. There shall be unitized pinion seals within the axle. The axle shall include a rigid differential case for high axle strength and reduced maintenance. The axle shall include single reduction gearing and shall have a rated capacity of 24,000 pounds. The rear axle and wheel bearings shall be an oil lubricated				
<b>76</b>	<b>VEHICLE TOP SPEED</b>			
The top speed of the vehicle shall be approximately 65 MPH +/-2 MPH at governed engine RPM.				
<b>77</b>	<b>REAR SUSPENSION</b>			
The single rear axle shall feature a Reyco or similar 79KB vari-rate, self-leveling captive slipper type conventional multi-leaf spring suspension, with 57.50 inch by 3.00 inch springs. One (1) adjustable and one (1) fixed torque rod shall be provided. The rear suspension capacity shall be rated from 21,000 to 31,500 pounds.				
<b>78</b>	<b>REAR SHOCK ABSORBERS</b>			
Two (2) Bilstein inert, nitrogen gas filled shock absorbers shall be provided and installed as part of the rear suspension system. The shocks shall be a monotubular design and fabricated using a special extrusion method, utilizing a single blank of steel without a welded seam, achieving an extremely tight peak-to-valley tolerance and maintains consistent wall thickness. The monotubular design shall provide superior strength while maximizing heat dissipation and shock life. The Bilstein front shocks shall include a digressive working piston assembly allowing independent tuning of the compression and rebound damping forces to provide optimum ride and comfort.				
<b>79</b>	<b>FRONT TIRES</b>			
The front tires shall be Michelin, or similar, 12R-22.5 16PR "H" tubeless radial XZE regional tread. The front tire stamped load capacity shall be 14,780 pounds per axle with a speed capacity of 75 miles per hour when properly inflated to 120 pounds per square inch. The front tire US Fire Service Intermittent Usage load capacity shall be 15,810 pounds per axle with a speed capacity of 75 miles per hour when properly inflated to 120 pounds per square inch.				
<b>80</b>	<b>REAR TIRES</b>			
The rear tires shall be Michelin, or similar, 11R-22.5 16PR "H" tubeless radial XDN2 all weather tread designed for exceptional traction and mileage. The rear tire stamped load capacity shall be 24,020 pounds per axle with a speed capacity				

of 75 miles per hour when properly inflated to 120 pounds per square inch. The rear tire US Fire Service Intermittent Usage load capacity shall be 24,820 pounds per axle with a speed capacity of 75 miles per hour when properly inflated to 120 pounds per square inch.				
<b>81</b>	<b>TIRE PRESSURE INDICATOR</b>			
There shall be a voucher provided with the chassis for a pop up style tire pressure indicator at each tire valve stem. The indicator shall provide visual indication of pressure in the specific tire. The tire pressure indicators shall be redeemed upon the vehicle manufacturer's receipt of the voucher for installation by the customer.				
<b>82</b>	<b>FRONT WHEELS</b>			
The front wheels shall be Accuride hub piloted, 22.50 inch by 8.25 inch polished aluminum wheels. The hub piloted mounting system shall provide easy installation and shall include two-piece flange nuts. The wheels shall be forged from a single piece of aluminum, designed to be corrosion resistant and engineered for a long life.				
<b>83</b>	<b>REAR WHEELS</b>			
The rear wheels shall be similar to Accuride hub piloted, heavy duty, 22.5 inch by 8.25 inch aluminum wheels. Each outer wheel shall have a polished aluminum finish on the exterior surface and each inner wheel shall have a machine finish. The wheels shall be forged from a single piece of aluminum, designed to be corrosion resistant and engineered for a long life. The hub piloted mounting system shall provide easy installation and shall include two-piece flange nuts.				
<b>84</b>	<b>WHEEL TRIM</b>			
The front wheels shall include stainless steel lug nut covers and stainless steel baby moons shipped loose with the chassis for installation by the apparatus builder. The baby moons shall have cutouts for oil seal viewing when applicable. The rear wheels shall include stainless steel lug nut covers and band mounted spring clip stainless steel high hats shipped loose with the chassis for installation by the apparatus builder. The lug nut covers, baby moons, and high hats shall be similar to RealWheels brand constructed of 304L stainless steel with a mirror finish. Each wheel trim component shall meet applicable D.O.T. certification.				
<b>85</b>	<b>BRAKE SYSTEM</b>			
A rapid build-up air brake system shall be provided. The air brakes shall include a two (2) air tank, three (3) reservoir system with a total of 4152 cubic inch of air capacity. A floor mounted treadle valve shall be mounted inside the cab for graduated control of applying and releasing the brakes. An inversion valve shall be installed to provide a controlled service brake application during an unlikely event including primary air supply loss. The rear axle spring brakes shall automatically apply in any situation when the air pressure falls below 25 PSI and shall include a mechanical means for releasing the spring brakes when necessary. An audible alarm shall designate when the system air pressure is below 60 PSI.				
<b>86</b>	<b>ANTI-LOCK BRAKING SYSTEM</b>			
A four (4) sensor, four (4) modulator anti-lock braking system (ABS) shall be installed on the front and rear axles in order to prevent the brakes from locking or skidding while braking during hard stops or on icy or wet surfaces. This in turn shall allow the driver to maintain steering control under heavy braking and in most instances, shorten the braking distance. The electronic monitoring system shall incorporate diagonal circuitry which shall monitor wheel speed during braking through a sensor and tone ring on each wheel. A dash mounted ABS lamp shall be provided to notify the driver of a system malfunction. The ABS system shall				

automatically disengage the auxiliary braking system device when required. The speedometer screen shall be capable of reporting all active defaults using PID/SID and FMI standards.				
<b>87</b>	<b>BRAKES, FRONT, REAR AND PARKING</b>			
The front brakes shall be similar to Meritor 16.5inches by 6inches S-cam drum type. The rear brakes shall be Meritor 16.50 inch by 7.00 inch S-cam drum type. Upon application of the push-pull valve in the cab, the rear brakes will engage via mechanical spring force. This is accomplished by dual chamber rear brakes, satisfying the FMVSS parking brake requirements.				
<b>88</b>	<b>PARK BRAKE CONTROL</b>			
A Meritor-Wabco, or similar, manual hand control push-pull style valve shall operate the parking brake system. The control shall be yellow in color. The parking brake actuation valve shall be mounted on the left hand dash to the right of the steering column within easy reach of the driver.				
<b>89</b>	<b>FRONT BRAKE SLACK ADJUSTERS</b>			
The front brakes shall include Meritor, or similar, automatic slack adjusters shall be installed on the chassis which features a simple, durable design offering reduced weight. The automatic slack adjusters shall feature a manual adjusting nut which cannot inadvertently be backed off and threaded grease fittings for easy serviceability.				
<b>90</b>	<b>REAR BRAKE SLACK ADJUSTERS</b>			
The rear brakes shall include Meritor, or similar, automatic slack adjusters shall be installed on the chassis which features a simple, durable design offering reduced weight. The automatic slack adjusters shall feature a manual adjusting nut which cannot inadvertently be backed off and threaded grease fittings for easy serviceability.				
<b>91</b>	<b>AIR DRYER</b>			
The brake system shall include a Wabco System Saver, or similar, 1200 air dryer with an integral 100 watt heater with a Metri-Pack, or similar, sealed connector. The air dryer incorporates an internal turbo cutoff valve that closes the path between the air compressor and the air dryer purge valve during the compressor "unload" cycle. The turbo cutoff valve allows purging of moisture and contaminants without the loss of turbo boost pressure. The air dryer shall be located on the right hand frame rail forward of the front wheel behind the right hand cab step.				
<b>92</b>	<b>FRONT BRAKE CHAMBERS</b>			
The front brakes shall be provided with MGM or similar type 30 brake chambers.				
<b>93</b>	<b>REAR BRAKE CHAMBERS</b>			
The rear axle shall include TSE 30/30 brake chambers, or similar, which shall convert the energy of compressed air into mechanical force and motion. This shall actuate the brake camshaft, which in turn shall operate the foundational brake mechanism forcing the brake shoes against the brake drum. The TSE Type 30 brake chamber shall offer a 30.00 square inch effective area.				
<b>94</b>	<b>AIR COMPRESSOR</b>			
The air compressor provided for the engine shall be a Wabco® SS318 single cylinder pass-through drive type compressor which shall be capable of producing 18.7 CFM at 1200 engine RPMs. The air compressor shall feature a higher delivery efficiency translating to more air delivery per horsepower absorbed. The				

compressor shall include an aluminum cylinder head which shall improve cooling, reduce weight and decrease carbon formation. Superior piston and bore finishing technology shall reduce oil consumption and significantly increasing the system component life.				
<b>95</b>	<b>AIR GOVERNOR</b>			
An air governor shall be provided to control the cut-in and cut-out pressures of the engine mounted air compressor. The governor shall be calibrated to meet FMVSS requirements. The air governor shall be located on the air cleaner bracket on the right frame rail behind the officer step.				
<b>96</b>	<b>AUXILIARY AIR RESERVOIR</b>			
One (1) auxiliary air tank, 1200 cubic inch reservoir, shall be installed on the chassis to act as an additional reserve supply to the air system for air horn, air tool, or other non-service brake use. The reservoir shall be isolated with a 90 PSI pressure protection valve on the reservoir supply side to prevent depletion of the air to the air brake system.				
<b>97</b>	<b>MOISTURE EJECTORS</b>			
Manual pet-cock type drain valves shall be installed on all reservoirs of the air supply system.				
<b>98</b>	<b>AIR SUPPLY LINES</b>			
A dual air system plumbed with color coded reinforced nylon tubing air lines shall be installed on the chassis. The primary (rear) brake line shall be green, the secondary (front) brake line red, the parking brake line orange and the auxiliary (outlet) will be blue. Brass compression type fittings shall be used on the nylon tubing. All drop hoses shall include fiber reinforced neoprene covered hoses.				
<b>99</b>	<b>AIR OUTLET CONNECTION</b>			
A quick release air outlet female connector shall be installed in the left lower cab step towards the front of the cab for the use of auxiliary air tools. The air outlet connector shall be compatible with a Milton 787, Parker Hannifin B13 or Meyers 54-410 connector.				
<b>100</b>	<b>PLUMBING AIR OUTLET CONNECTION</b>			
The cab mounted air outlet connection shall be plumbed to the chassis auxiliary air system reservoir.				
<b>101</b>	<b>AIR INLET/ OUTLET FITTING TYPE</b>			
The air connector supplied shall be a 0.25 inch size Tru-Flate Interchange style manual connection which is compatible with Milton 'T' style, Myers 0.25 inch Automotive style and Parker 0.25 inch 10 Series connectors.				
<b>102</b>	<b>TRAILER AIR BRAKE CONNECTION PACKAGE</b>			
The trailer air brake connection shall be accomplished via tractor glad hands which shall be attached to 15.00 feet of color coded coiled air hoses. The trailer parking brake control release shall be mounted in the center of the dash.				
<b>103</b>	<b>TRAILER AIR BRAKE HAND CONTROL</b>			
A trailer hand control valve, for applying the trailer brakes, shall be mounted to the steering column.				
<b>104</b>	<b>VEHICLE TOWED AIR SUPPLY PACKAGE</b>			
The chassis shall include a vehicle towing air supply package. The air service brake connection shall be accomplished via trailer glad hands located under the left side of the front bumper. The mating surface of the glad hand connections shall be rotated horizontal. The glad hand connections shall be located in the				

forward position and shall protrude beyond the face of the front bumper when connected. The glad hands shall allow a service tow truck to tie into the disabled vehicle's air system and unlock the rear brakes.				
<b>105</b>	<b>TRAILER SUPPLY VALVE</b>			
A trailer air supply valve, for charging up the air system in the trailer, shall be installed in the center forward area of the engine tunnel.				
<b>106</b>	<b>FIFTH WHEEL</b>			
The frame shall include a Holland Company Fleet Master FW35, or similar, series stationary, fifth wheel hitch with left hand release and an XA-201 series top plate. The nominal fifth wheel height shall be 6.62 inch above the frame. The kingpin center shall be approximately 4.00 inches forward of the centerline of the rear axle.				
<b>107</b>	<b>WHEELBASE</b>			
The chassis wheelbase shall measure 136.00 inches.				
<b>108</b>	<b>REAR OVERHANG</b>			
The chassis rear overhang shall be 51.00 inches.				
<b>109</b>	<b>FRAME</b>			
<p>The frame shall consist of single channel rails running parallel to each other reinforced with cross members forming a ladder style frame. The sides of the rails shall be formed in the shape of a "C" channel, 10.25 inches high by 3.5 inches deep by .38 inches, with an inner channel 9.44 inches high by 3.13 inches deep by .38 inches thick with an 110,000 psi minimum yield high strength low alloy steel. Each single rail shall be rated by a Resistance Bending Moment (RBM) minimum of 1,830,400 inch pounds and have a minimum section modulus of 16.64 cubic inches. The frame shall measure 34.25 inches in width. The frame shall include trailer pick up style ramps at the rear section of each rail. The trailer pick-up slope of the frame shall be 14.00 inches by 5.00 inches. <b>PROPOSALS CALCULATING THE FRAME STRENGTH USING THE "BOX METHOD" SHALL NOT BE CONSIDERED. PROPOSALS INCLUDING HEAT TREATED RAILS SHALL NOT BE CONSIDERED.</b></p> <p>A minimum of seven (7) fully gusseted 0.25 inch thick cross members shall be installed. <b>THE INCLUSION OF THE BODY MOUNTING, OR BUMPER MOUNTING SHALL NOT BE CONSIDERED AS A CROSS MEMBER.</b> The cross members shall be attached using zinc coated grade 8 fasteners. The head bolts shall be flanged type with distorted threads, held in place by flanged lock nuts. Each cross member shall be mounted to the frame rails utilizing a minimum of 0.25 inch thick gusset reinforcement plates at all corners balancing the area of force throughout the entire frame. <b>ANY PROPOSALS NOT INCLUDING ADDITIONAL REINFORCEMENT FOR EACH CROSS MEMBER SHALL NOT BE CONSIDERED.</b></p> <p>Frame rails will be manufactured such that bolt attachment holes are specific for each component and shall not include any unnecessary holes. All relief areas shall be cut in with a minimum 2.00 inch radius at intersection points with the edges ground to a smooth finish to prevent a stress concentration point. The frame and cross members shall carry a lifetime warranty to the original purchaser. A copy of the frame warranty shall be provided upon delivery. <b>PROPOSALS OFFERING WARRANTIES FOR FRAMES NOT INCLUDING CROSS MEMBERS SHALL NOT BE CONSIDERED.</b></p>				

<b>110</b>	<b>REAR TOW DEVICE</b>			
Two (2) heavy duty painted tow eyes shall be installed extending rearward from the frame at the rear of the chassis. The tow eyes shall be fabricated from 0.75 inch thick #1020 ASTM-36 hot rolled steel. The inside diameter of the tow eye shall be 2.00 inches and shall have a chamfered edge. The tow eyes shall be bolted one (1) on each side to the outside of the chassis frame with grade 8 bolts. The tow eyes shall be painted to match the chassis frame.				
<b>111</b>	<b>FRAME CLEAR AREA</b>			
The chassis frame shall be left clear of chassis mounted components inside the frame rails within the first 30.00 inches behind the cab to allow space for OEM installed components. Cross members may be installed in the clear area if required for proper frame or driveline configuration.				
<b>112</b>	<b>FRAME PAINT</b>			
The frame shall be powder coated black prior to any attachment of components. All powder coatings, primers and paint shall be compatible with all metals, pretreatments and primers used. The cross hatch adhesion test per ASTM D3359 shall not have a fail of more than ten (10) squares. The pencil hardness test per ASTM D3363 shall have a final post-cured pencil hardness of H-2H. The direct impact resistance test per ASTM D2794 shall have an impact resistance of 120.00 inches per pound at 2 mils. The salt spray resistance per ASTM B-117-97 shall pass 500 hours of salt spray test. The applied process shall allow the application of other products over it and still maintain or exceed the 500 hours salt spray test. Any proposals offering painted frame with variations from the above process shall not be accepted. The film thickness of vendor supplied parts shall also be sufficient to meet the performance standards as stated above.				
<b>113</b>	<b>FRONT BUMPER</b>			
A one piece, two (2) rib wrap-around style, polished stainless steel front bumper shall be provided. The material shall be 10 gauge, 304 stainless steel, 12 inches high and 99 inches wide. The front bumper shall be extended approximately 24 inches ahead of the cab. The front bumper extension shall an overall width of 47.5 inches				
<b>114</b>	<b>FRONT BUMPER APRON</b>			
The 24 inch extended front bumper shall include an apron constructed of 0.19 inch thick embossed aluminum tread plate. The apron shall be installed between the bumper and the front face of the cab affixed using stainless steel bolts attaching the apron to the top bumper flange.				
<b>115</b>	<b>FRONT BUMPER GUIDE POLES</b>			
The cab bumper sides shall include a 42 inch chromed pole on the driver and officer sides of the bumper. The poles shall be mounted so the top of the pole is approximately at the same height of the windshield. Each pole shall include an amber light at the top for improved night visibility. There shall be an electrical connection to allow for ease of removal and or replacement.				
<b>116</b>	<b>AIR HORN</b>			
The front bumper shall include two (2) Hadley or similar brand E-Tone air horns which shall measure 24 inches long with a 6 inch round flare. The air horn shall be a trumpet style and shall include a chrome finish on the inside and a black painted finish on the outside of the trumpet.				

<b>117</b>	<b>AIR HORN LOCATION</b>			
The air horns shall be recess mounted in the front bumper face, one (1) on the driver side of the bumper in the inboard position relative to the left hand frame rail and one (1) on the officer side of the bumper in the inboard position relative to the right hand frame rail.				
<b>118</b>	<b>AIR HORN RESERVOIR</b>			
One (1) air tank, with a 1200 cubic inch reservoir, shall be installed on the chassis to act as a supply tank for operating air horns. The reservoir shall be isolated with a 90 PSI pressure protection valve on the reservoir supply side to prevent depletion of the air to the air brake system.				
<b>119</b>	<b>ELECTRONIC SIREN SPEAKER</b>			
The bumper shall include one (1) Federal Signal model BP200-Q speaker, or similar, which shall be recess mounted within the bumper fascia and include the classic Q-style grille. The speaker shall feature 200 watts of power. The speaker shall measure approximately 5.50 inches high by 7.70 inches wide by 7.80 inches deep.				
<b>120</b>	<b>ELECTRONIC SIREN SPEAKER LOCATION</b>			
The electronic siren speaker shall be located on the front bumper face in the center position between the frame rails.				
<b>121</b>	<b>FRONT BUMPER TOW HOOKS</b>			
Two (2) heavy duty tow hooks, painted to match the chassis frame, shall be installed below the front bumper, rearward position and bolted directly to the chassis frame with grade 8.0 bolts. The tow hooks shall be mounted on the bottom flange of the frame when the bumper extension is 21 inches or greater, or on the side of the frame when the extension length is less than 21 inches.				
<b>122</b>	<b>CAB TILT SYSTEM</b>			
The entire cab shall be capable of tilting 45 degrees to allow for easy maintenance of the engine and transmission. The electric-over-hydraulic lift system shall include an ignition interlock and red cab lock down indicator lamp on the tilt control which shall illuminate when holding the "Down" button to indicate safe road operation. It shall be necessary to activate the master battery switch and set the parking brake in order to tilt the cab. As a third precaution the ignition switch must be turned off to complete the cab tilt interlock safety circuit. Two (2) spring-loaded hydraulic hold down hooks located outboard of the frame shall be installed to hold the cab securely to the frame. Once the hold-down hooks are set in place, it shall take the application of pressure from the hydraulic cab tilt lift pump to release the hooks. Two (2) cab tilt cylinders shall be provided with velocity fuses in each cylinder port. The cab tilt pivots shall be 1.90 inch ball and be anchored to frame brackets with 1.25 inch diameter studs. A steel safety channel assembly shall be installed on the right side cab lift cylinder to prevent accidental cab lowering. The safety channel assembly shall fall over the lift cylinder when the cab is in the fully tilted position. A cable release system shall also be provided to retract the safety channel assembly from the lift cylinder to allow the lowering of the cab.				
<b>123</b>	<b>CAB TILT AUXILIARY PUMP</b>			
A manual cab tilt pump module shall be attached to the rear surface of the driver side battery box.				
<b>124</b>	<b>CAB TILT CONTROL RECEPTACLE</b>			
A 6-pin Deutsch type connector that includes a cap shall be installed in the front				



bumper tail on the right hand side to provide a place to plug in the cab tilt remote control pendant. The remote control pendant shall also include 20.00 feet of cable and shall include a mating connector.				
<b>125</b>	<b>CAB WINDSHIELD</b>			
<p>The cab windshield shall have a surface area of about 2,825 square inches and be of a two (2) piece wraparound design for maximum visibility. The distance from the driver and officer to the windshield shall be a minimum of 42 inches at the furthest seated position. This distance shall ensure the safety of the driver and officer from intruding objects in the unlikely event of a head on collision. The glass utilized for the windshield shall have a standard green automotive tint and VTL (visual light transmission). The left and right windshield shall be fully interchangeable thereby minimizing stocking and maintenance costs. <b>ALL PROPOSALS OFFERING WINDSHIELDS NOT IN COMPLIANCE WITH THE MINIMUM MEASUREMENT OF SURFACE AREA STATED ABOVE AND ARE NOT FULLY INTERCHANGEABLE SHALL NOT BE CONSIDERED.</b></p>				
<b>126</b>	<b>GLASS, FRONT DOORS</b>			
<p>The front cab doors shall include a window which is 27 inches wide by 26 inches high and shall have a standard green automotive tint and VTL. These windows shall have the capability to roll down completely into the door housing. This shall be accomplished manually utilizing a crank style handle on the inside of the door. A reinforced window regulator assembly shall be provided for severe duty use. There shall be an irregular shaped fixed window which shall measure 2.5 inches wide at the top, 8 inches wide at the bottom by 26 inches in height, more commonly known as "cozy glass" ahead of the front door roll down windows. The windows shall be mounted within the frame of the front doors trimmed with a black anodized ring on the exterior.</p>				
<b>127</b>	<b>GLASS, REAR DOORS</b>			
<p>Both rear doors shall include a window which is 27 inches wide by 26 inches high. These windows shall roll up and down manually utilizing a crank style handle. A reinforced window regulator assembly shall be provided for severe duty use. The windows shall include a standard green automotive tint and VTL.</p>				
<b>128</b>	<b>GLASS, SIDE, MID RH</b>			
<p>The cab shall include windows on the driver's and officer's side, behind the front and ahead of the crew doors, which shall measure 16 inches wide by 26 inches high. This window shall be fixed within this space and shall be rectangular in shape. The window shall be mounted using self locking window rubber. The glass utilized for this window shall include a standard green automotive tint and VTL.</p>				
<b>129</b>	<b>CLIMATE CONTROL</b>			
<p>The cab shall include a minimum 44,000 BTU/Hr front overhead heater/defroster system which shall be mounted on the ceiling between the sun visors. The system shall include two (2) adjustable comfort louvers, defrost duct(s) for windshield defrost/defog, and two (2) side demist louvers for side window defog. The comfort louvers shall face rearward at center of cab to direct air towards the driver, officer, and mid-crew area. The defrost duct(s) shall be fixed in position to direct air to the windshield and shall not have adjustable louvers. The side demist louvers shall face rearward in the outboard position towards the front side door windows. The cab shall also include a combination heater air-conditioning unit mounted on the engine tunnel. This unit shall offer eight (8) adjustable louvers, (4 forward facing, four rearward facing) and a temperature control valve, and shall</p>				

be capable of circulating 550 cubic feet of air per minute. The unit shall be rated for 42,500 BTU/Hr of cooling and 36,000 BTU/Hr of heating. The outer cover of this unit shall be metal with a black powder coat finish. All defrost/heating systems shall be plumbed with one (1) seasonal shut-off valve at the front corner on the right side of the cab. The air conditioner lines shall use Aeroquip type GH 134 flexible hose with Aeroquip type EZ-clip fittings.				
<b>130</b>	<b>CLIMATE CONTROL ACTIVATION</b>			
The forward heating and defrosting controls shall be located on the dash next to driver panel, in a position which is easily accessible to the driver. The tunnel mounted heating and air conditioning controls shall be mounted on the heater/air conditioning unit.				
<b>131</b>	<b>A/C CONDENSER &amp; COMPRESSOR LOCATION</b>			
A roof mounted A/C condenser shall be installed centered on the cab, forward of raised roof, against the slope rise. The air-conditioning compressor shall be a belt driven, engine mounted, open type compressor that shall be capable of producing a minimum of 32000 BTU at 1500 RPMs. The compressor shall utilize R-134A refrigerant and PAG oil.				
<b>132</b>	<b>CAB INSULATION</b>			
The cab ceiling and walls shall include 1.00 inch thick foam insulation. The insulation shall act as a barrier absorbing noise as well as assisting in sustaining the desired climate within the cab interior.				
<b>133</b>	<b>UNDER CAB INSULATION</b>			
The underside of the cab tunnel surrounding the engine shall be lined with multi-layer insulation, engineered for application inside diesel engine compartments. The insulation shall act as a noise abatement component keeping the decibel level in the cab within NFPA recommendations as well as sustaining the desired temperature within the cab interior. The engine tunnel insulation shall measure approximately 3/4 inch thick including a vertically lapped polyester fiber layer, a 1.0 lb/ft <sup>2</sup> PVC barrier layer, an open cell foam layer, and a moisture and heat reflective foil facing reinforced with a woven fiberglass layer. The insulation shall meet or exceed FMVSS 302 flammability test. The insulation shall be cut precisely to fit each section and sealed for additional heat and sound deflection. The insulation shall be held in place by 3 mils of acrylic pressure sensitive adhesive and aluminum pins with hard hat, hold in place fastening heads.				
<b>134</b>	<b>INTERIOR TRIM FLOOR</b>			
The floor of the cab shall be covered with a multi-layer mat consisting of 0.25 inch thick sound absorbing closed cell foam with a 0.06 inch thick non-slip vinyl surface with a pebble grain finish. The covering shall be held in place by a pressure sensitive adhesive and aluminum trim molding. All exposed seams shall be sealed with silicone caulk matching the color of the floor mat to reduce the chance of moisture and debris retention. The cab interior floor mat shall be gray in color.				
<b>135</b>	<b>INTERIOR TRIM</b>			
The cab interior shall include trim on the front ceiling, rear crew ceiling, and the cab walls. It shall be easily removable to assist in maintenance. The trim shall be constructed of insulated vinyl over a hard board backing. The cab interior vinyl trim surfaces shall be gray in color. The rear wall of the cab shall be trimmed with vinyl. The cab interior vacuum formed ABS composite trim surfaces shall be gray in color. The cab interior shall include the header above the driver and officer positions which shall be constructed of vacuum formed ABS panel.				

<b>136</b>	<b>INTERIOR TRIM SUNVISOR</b>			
The header shall include two (2) sun visors, one each side above the windshield. Each sun visor shall be constructed of Masonite, or similar, and covered with padded vinyl trim.				
<b>137</b>	<b>CENTER DASH TRIM</b>			
The main center dash area shall be constructed of durable vacuum formed ABS composite. The left hand dash shall be a one (1) piece durable vacuum formed ABS composite housing which shall be custom molded for a perfect fit around the instrument panel and the lower control panels to the left and right of the steering column. The right hand dash trim shall consist of a vacuum formed ABS composite module, which contains a glove compartment with a hinged locking door and a Mobile Data Terminal (MDT) provision. The glove compartment size shall be 13.5 inches wide by 6.25 inches high by 5.5 inches deep. The MDT provision shall be provided above the glove compartment.				
<b>138</b>	<b>ENGINE TUNNEL TRIM</b>			
The cab engine tunnel shall be covered with .44 of an inch thick multi-layer mat consisting of .25 inch closed cell foam, .13 of an inch thick PVC acoustical barrier and .06 inch thick non-slip pebble grain. The engine tunnel mat shall be trimmed with anodized aluminum stair nosing trim.				
<b>139</b>	<b>POWER POINT DASH MOUNT</b>			
The cab shall include one (1) 12 volt cigar lighter type receptacle in the cab dash dedicated as a power source for additional portable or mobile items. The receptacle shall be wired to be live with the battery master switch.				
<b>140</b>	<b>STEP TRIM</b>			
Each cab entry door shall include a three step entry. The first step closest to the ground shall be constructed of polished 5032 H32 aluminum Grip Strut type grating with angled outer corners. The step shall feature a splash guard to reduce water and debris from splashing in to the step. The splash guard shall have an opening on the outer edge to allow debris and water to flow through rather than becoming trapped within the stepping surface. The lower step shall be mounted to a frame which is integral with the construction of the cab for rigidity and strength. The middle step shall be integral with the cab construction and shall be trimmed with a Flex-Tred® adhesive grit surface material.				
<b>141</b>	<b>UNDER CAB ACCESS DOOR</b>			
The cab shall include an access door in the left crew step riser constructed of DA finish aluminum with a push and turn latch. The under cab access door shall provide access to the diesel exhaust fluid fill.				
<b>142</b>	<b>INTERIOR DOOR TRIM</b>			
The doors of the cab shall include a painted aluminum plate the same weight and grade as the cab on the interior of the door. The inner door panel surfaces shall be painted with a Zolatone #20-72, or similar, silver gray texture finish.				
<b>143</b>	<b>DOOR TRIM CUSTOMER NAMEPLATE</b>			
The interior door trim on the front doors shall include a customer nameplate which states the vehicle was custom built for their Department.				
<b>144</b>	<b>CAB DOOR TRIM REFLECTIVE</b>			
The interior of each door shall include high visibility reflective tape. A white reflective tape that measures 1 inch in width shall be provided vertically along the rear outer edge of the door. The lowest portion of each door skin shall include a				

reflective tape chevron with red and white stripes. The chevron tape shall measure 6 inches in height.				
<b>145</b>	<b>INTERIOR GRAB HANDLE "A" PILLAR</b>			
A rubber covered 11 inch grab handle shall be provided on the inside of the cab on the hinge post at the driver and officer doors to assist personnel in exiting and entering the cab.				
<b>146</b>	<b>INTERIOR GRAB HANDLE FRONT DOOR</b>			
Each front door shall include one (1) ergonomically contoured 9.00 inch cast aluminum handle mounted horizontally on the interior door panels. The handles shall feature a textured black powder coat finish to assist personnel entering and exiting the cab.				
<b>147</b>	<b>INTERIOR GRAB HANDLE REAR DOOR</b>			
A black powder coated cast aluminum assist handle shall be provided on the inside of each rear crew door. A 30.00 inch long handle shall extend horizontally the width of the window just above the window sill. The handle shall assist personnel in exiting and entering the cab.				
<b>148</b>	<b>DASH PANEL GROUP</b>			
The main center dash area shall include three (3) removable panels located: one (1) to the right of the driver position, one (1) in the center of the dash and one (1) to the left of the officer position. The center panel shall be within comfortable reach of both the driver and officer.				
<b>149</b>	<b>SWITCHES CENTER PANEL</b>			
The center dash panel shall include twelve (12) rocker switch positions in a six (6) over six (6) switch configuration in the left portion of the panel. A rocker switch with a blank legend installed directly above shall be provided for any position without a switch and legend designated by a specific option. The non-specified switches shall be two-position, black switches with a green indicator light. Each blank switch legend can be custom engraved by the body manufacturer. All switch legends shall have backlighting provided.				
<b>150</b>	<b>SWITCHES, LEFT AND RIGHT PANEL</b>			
<p>The left dash panel shall include eight (8) switches in a single row configuration. Five (5) of the switches shall be rocker type and the left three (3) shall be the headlight switch, the instrument lamp dimmer switch and the windshield wiper/washer control switch. A rocker switch with a blank legend installed directly above shall be provided for any position not designated by a specific option. The non-designated switches shall be two-position, black switches with a green indicator light. Each blank switch legend can be custom engraved by the body manufacturer. All switch legends shall have backlighting provided.</p> <p>The right dash panel shall include no rocker switches or legends.</p>				
<b>151</b>	<b>SEAT BELT WARNING</b>			
A Class One seat belt warning system, integrated with the Vehicle Data Recorder system, shall be installed for each seat within the cab. The VDR will provide visual indication of seats which were belted in incorrect sequence or when a seat is occupied without the seat belt being fastened. The visual indicator located on the instrument panel shall illuminate and the audible alarm shall sound when the park brake is released and a seat is occupied without the corresponding seatbelt being fastened. The visual indicator shall illuminate and the audible alarm shall also sound when the park brake is released and a seat has been belted in the incorrect sequence. The system shall provide visual and audible warning when				

any seat is occupied (sixty pounds minimum), the corresponding seat belt remains unfastened, and the park brake is released. Once activated, the visual and audible indicators shall remain active until all occupied seats have the seat belts fastened in the correct sequence.				
<b>152</b>	<b>SEAT MATERIAL</b>			
The seats shall include a covering of high strength, wear resistant fabric made of a durable ballistic polyester. A PVC coating shall be bonded to the back side of the material to help protect the seats from UV rays and from being saturated or contaminated by fluids. Common trade names for this material are Imperial 1200 and Durawear.				
<b>153</b>	<b>SEAT COLOR</b>			
All seats supplied with the chassis shall be black in color. All seats shall include red seat belts.				
<b>154</b>	<b>SEAT DRIVER</b>			
The driver's seat shall be an H.O. Bostrom Firefighter Sierra model seat or similar. The seat shall feature eight way, electric positioning. The eight positions shall include up and down, fore and aft with 8.00 inches of travel, back angle adjustment and seat rake adjustment. The seat shall feature integral springs to isolate shock. The seat shall feature an all belts to seat (ABTS) style of safety restraint. The ABTS feature shall include a three-point shoulder harness with the lap belt, automatic retractor and buckle as an integral part of the seat assembly. The minimum vertical dimension from the seat H-point to the ceiling for this belted seating position shall be 35 inches measured with the seat height adjusted to the lowest position of travel. This model of seat shall have successfully completed the static load tests set forth by FMVSS 207, 209, and 210 in effect at the time of manufacture. This testing shall include a simultaneous forward load of 3000 pounds each on the lap and shoulder belts and twenty (20) times the weight through the center of gravity. The seat back shall feature a contoured head rest. The materials used in construction of the seat shall also have successfully completed testing with regard to the flammability of materials used in the occupant compartments of motor vehicles as outlined in FMVSS 302, of which dictates the allowable burning rate of materials in the occupant compartments of motor vehicles.				
<b>155</b>	<b>SEAT, OFFICER</b>			
The officer's seat shall be an H.O. Bostrom Firefighter model or similar seat. The seat shall feature two-way manual adjustment and shall include a tapered and padded seat cushion. The seat shall also feature integral springs to isolate shock. The seat shall feature an all belts to seat (ABTS) style of safety restraint. The ABTS feature shall include a three-point shoulder harness with the lap belt, automatic retractor and buckle as an integral part of the seat assembly. The minimum vertical dimension from the seat H-point to the ceiling for this belted seating position shall be 35.00 inches. This model of seat shall have successfully completed the static load tests by FMVSS 207, 209, 210 and 302 in effect at the time of manufacture. This testing shall include a simultaneous forward load of 3000 pounds each on the lap and shoulder belts and twenty (20) times the weight through the center of gravity. The model of seats shall also have successfully completed the flammability of materials used in the occupant compartments of motor vehicles as outlined in FMVSS 302, of which decides the burning rate of materials in the occupant compartments of motor vehicles.				
<b>156</b>	<b>SEAT BACK, OFFICER</b>			
The officer's seat shall feature a SecureAll™ SCBA locking system which shall be				

<p>one bracket model and store all U.S. and International SCBA brands and sizes while in transit or for storage within the seat back. The bracket shall be easily adjustable with all adjustment points using similar hardware and adjustments with one tool. The bracket system shall be free of straps and clamps that may interfere with auxiliary equipment on SCBA units. The center guide fork shall keep the taken in place for a safe and comfortable fit in the seat back cavity. The SCBA unit simply needs to be pushed against the pivot arm to engage the patented auto- locking system. Once the lock is engaged, the top clamp shall surround the top of the SCBA tank for a secure fit in all directions. The SecureAll™ shall include a release handle which shall be integrated into the seat cushion for quick and easy release. This shall eliminate the need for straps or pull cords to interfere with other SCBA equipment.</p>				
<b>157</b>	<b>POWER SEAT WIRING</b>			
<p>The power seat or seats installed in the cab shall be wired directly to battery power.</p>				
<b>158</b>	<b>SEAT REAR FACING OUTER LOCATION</b>			
<p>The crew area shall include two (2) rear facing crew seats, which include one (1) located directly behind the driver seat and one (1) located directly behind the officer seat.</p>				
<b>159</b>	<b>SEAT CREW REAR FACING OUTER</b>			
<p>The crew area shall include a seat in the rear facing outboard position which shall be a H.O. Bostrom Firefighter series or similar. The seat shall feature a tapered and padded seat, and cushion. The seat and cushion shall be spring load hinged and compact in design for additional room and shall remain in the stored position until occupied. The seat shall feature an all belts to seat (ABTS) style of safety restraint. The ABTS feature shall include a three-point shoulder harness with the lap belt and automatic retractor as an integral part of the seat assembly. The buckle portion of the seat belt shall extend from the seat base towards the driver position within easy reach of the occupant. The minimum vertical dimension from the seat H-point to the ceiling for each belted seating position shall be 35.00 inches. This model of seat shall have successfully completed the static load tests by FMVSS 207/210. This testing shall include a simultaneous forward load of 3000 pounds each on the lap and shoulder belts and twenty (20) times the weight through the center of gravity. This model of seat installed in the cab model, as specified, shall have successfully completed the dynamic sled testing using FMVSS 208 as a guide with the following accommodations. In order to reflect the larger size outfitted firefighters, the test dummy used shall be a 95th percentile hybrid III male weighing 225 pounds rather than the 50<sup>th</sup> percentile male dummy weighing 165 pounds as referenced in FMVSS 208. The model of seats shall also have successfully completed the flammability of materials used in the occupant compartments of motor vehicles as outlined in FMVSS 302, of which decides the burning rate of materials in the occupant compartments of motor vehicles.</p>				
<b>160</b>	<b>SEAT BACK REAR FACING OUTER</b>			
<p>The rear facing outboard seat shall feature a Bostrom SecureAll™ SCBA locking system or similar which shall store all U.S. and International SCBA brands and bottle sizes while in transit or for storage within the seat back. The bracket shall be easily adjustable at all adjustment points with one tool. The bracket system shall be free of straps that may interfere with auxiliary equipment on SCBA units. The center guide fork shall keep the SCBA bottle in place for a safe and comfortable fit in the seat back cavity. The SCBA unit simply needs to be pushed against the pivot arm to engage the patented auto locking system. Once the lock</p>				

is engaged, the top clamp shall surround the top of the SCBA tank for a secure fit in all directions. The SecureAll™ shall include a release handle which shall be integrated into the center of the bottom seat cushion for easy access and to eliminate hooking the release handle with clothing or other equipment.				
<b>161</b>	<b>SEAT MOUNTING REAR FACING OUTER</b>			
The rear facing outer seat shall be mounted facing the rear of the cab.				
<b>162</b>	<b>SEAT REAR FACING CENTER LOCATION</b>			
The crew area shall include two (2) rear facing crew seats, which include one (1) located directly behind the engine tunnel on the driver side of the cab and one (1) located directly behind the engine tunnel on the officer side of the cab.				
<b>163</b>	<b>SEAT CREW REAR FACING CENTER</b>			
The crew area shall include a seat in the rear facing center position which shall be a H.O. Bostrom Firefighter series or similar. The seat shall feature a tapered and padded seat, and cushion. The seat and cushion shall be spring load hinged and compact in design for additional room and shall remain in the stored position until occupied. The seat shall feature an all belts to seat (ABTS) style of safety restraint. The ABTS feature shall include a three-point shoulder harness with the lap belt and automatic retractor as an integral part of the seat assembly. The buckle portion of the seat belt shall extend from the seat base towards the driver position within easy reach of the occupant. The minimum vertical dimension from the seat H-point to the ceiling for each belted seating position shall be 35.00 inches. This model of seat shall have successfully completed the static load tests by FMVSS 207/210. This testing shall include a simultaneous forward load of 3000 pounds each on the lap and shoulder belts and twenty (20) times the weight through the center of gravity. This model of seat installed in the cab model, as specified, shall have successfully completed the dynamic sled testing using FMVSS 208 as a guide with the following accommodations. In order to reflect the larger size outfitted firefighters, the test dummy used shall be a 95th percentile hybrid III male weighing 225 pounds rather than the 50 <sup>th</sup> percentile male dummy weighing 165 pounds as referenced in FMVSS 208. The model of seats shall also have successfully completed the flammability of materials used in the occupant compartments of motor vehicles as outlined in FMVSS 302, of which decides the burning rate of materials in the occupant compartments of motor vehicles.				
<b>164</b>	<b>SEAT BACK REAR FACING CENTER</b>			
The rear facing center seat shall feature a SecureAll™ SCBA locking system which shall be one bracket model and store all U.S. and International SCBA brands and sizes while in transit or for storage within the seat back. The bracket shall be easily adjustable with all adjustment points using similar hardware and adjustments with one tool. The bracket system shall be free of straps and clamps that may interfere with auxiliary equipment on SCBA units. The center guide fork shall keep the taken in place for a safe and comfortable fit in the seat back cavity. The SCBA unit simply needs to be pushed against the pivot arm to engage the patented auto- locking system. Once the lock is engaged, the top clamp shall surround the top of the SCBA tank for a secure fit in all directions. The SecureAll™ shall include a release handle which shall be integrated into the seat cushion for quick and easy release. This shall eliminate the need for straps or pull cords to interfere with other SCBA equipment.				
<b>165</b>	<b>SEAT BELT ORIENTATION CREW</b>			
The crew position seat belts shall follow the standard orientation which extends from the outboard shoulder extending to the inboard hip.				

<b>166</b>	<b>SEAT FRAME REAR FACING CENTER</b>			
The rear facing center seating shall include a seat frame which is located and installed behind the engine tunnel. The seat frame shall measure 39.63 inches wide by 12 inches high by 15.88 inches deep. The seat frame shall be constructed of 5052-H32, 0.19 inch thick, smooth aluminum plate. The seat box shall be painted with the same color as the remaining interior.				
<b>167</b>	<b>SEAT FRAME REAR FACING CENTER STORAGE ACCESS</b>			
The rear facing center seat frame shall include a storage access opening which shall measure 32 inches wide by 8.75 inches high to allow access within the seat frame for storage. A solid access door which shall measure 34 inches wide by 11.12 inches high shall be provided at the opening.				
<b>168</b>	<b>CAB FRONT UNDERSEAT STORAGE ACCESS</b>			
The left and right under seat storage areas shall have a solid aluminum hinged door with non-locking latch.				
<b>169</b>	<b>SEAT COMPARTMENT DOOR FINISH</b>			
All under seat storage compartment access doors shall have a Zolatone #20-72 silver gray texture.				
<b>170</b>	<b>WINDSHIELD WIPER SYSTEM</b>			
The cab shall include a dual arm wiper system which shall clear the windshield of water, ice and debris. There shall be two (2) windshield wipers which shall be affixed to a radial wet arm. The system shall include a single motor which shall initiate the arm in which both the left hand and right hand windshield wipers are attached, initiating a back and forth motion for each wiper. The wiper motor shall be activated by an intermittent wiper control located within easy reach of the driver's position.				
<b>171</b>	<b>ELECTRONIC WINDSHIELD FLUID LEVEL INDICATOR</b>			
The windshield washer fluid level shall be monitored electronically. When the washer fluid level becomes low the yellow "Check Message Center" indicator light on the instrument panel shall illuminate and the message center in the speedometer shall display a "Check Washer Fluid Level" message.				
<b>172</b>	<b>CAB DOOR HARDWARE</b>			
The cab entry doors shall be equipped with exterior pull handles, suitable for use while wearing firefighter gloves. The handles shall be FRP composite with a black matt finish. All doors shall include keyed alike locks that are designed to prevent accidental lockout. The interior latches shall be black flush paddle type, which are incorporated into an upper door panel.				
<b>173</b>	<b>DOOR LOCKS</b>			
Each cab entry door shall include a manually operated door lock. The each door lock may be actuated from the inside of the cab by means of a red knob located on the paddle handle of the respective door or by using a TriMark or similar key from the exterior. The door locks are designed to prevent accidental lock out.				
<b>174</b>	<b>GRAB HANDLES</b>			
The cab shall include one (1) 18.00 inch knurled, anti-slip, one-piece exterior assist handle behind each cab door. The grab handle shall be made of 14 gauge 304- stainless steel and be 1.25 inch diameter to enable non-slip assistance with a gloved hand.				



<b>175</b>	<b>REARVIEW MIRRORS</b>			
Retrac Aerodynamic West Coast style single vision mirror heads model 613275 shall be provided and installed on each of the front cab doors. The mirrors shall be mounted via 1 inch diameter tubular stainless steel arms to provide a rigid mounting to reduce mirror vibration. The mirrors shall measure 8 inches wide by 19 inches high and shall include 8 inch convex mirrors with a stainless steel back, typically model 980-4, installed below the flat glass to provide a wider field of vision. The flat mirrors shall be motorized with remote horizontal and vertical adjustment. The control switches shall be mounted within easy reach of the driver. The convex mirrors shall be manually adjustable. The flat mirror glass shall be heated for defrosting in severe cold weather conditions. The mirrors shall be constructed of a vacuum formed chrome plated ABS plastic housing and shall include the finest quality non-glare glass.				
<b>176</b>	<b>REARVIEW MIRROR HEAT SWITCH</b>			
The heat for the rearview mirrors shall be controlled through a rocker switch in the mirror control panel on the driver's side dash.				
<b>177</b>	<b>CAB FENDER</b>			
Full width wheel well liners shall be installed on the cab to limit road splash and enable easier cleaning. The two-piece liners shall consist of an inner liner, 16 inches wide, made of vacuum formed ABS composite and an outer fenderette 3 inches wide made of 12 gauge polished aluminum.				
<b>178</b>	<b>IGNITION</b>			
A master battery system with a keyless start ignition system shall be provided. Each system shall be controlled by a ¼ turn Cole Hersee, or similar, switch, both shall be mounted to the left of the steering wheel on the dash. A chrome push type starter button shall be provided adjacent to the master battery and ignition switches. Each switch shall illuminate a green LED indicator light on the dash when the respective switch is placed in the "ON" position. The starter button shall only operate when both the master battery and ignition switches are in the "ON" position.				
<b>179</b>	<b>BATTERY</b>			
The single start electrical system shall include (3) Harris BCI 31 950 CCA batteries with a 210 minute reserve capacity and 4/0 welding type dual path starter cables per SAE J541. The cables shall have encapsulated ends with heat shrink and sealant.				
<b>180</b>	<b>BATTERY TRAY</b>			
The batteries shall be installed on a steel battery tray located on the left side of the chassis, securely bolted to the frame rails. The battery tray shall be coated with the same material as the frame. The battery tray shall include drain holes in the bottom for sufficient drainage of water. A durable, nonconducting, interlocking mat (typically made by Dri-Dek) shall be installed in the bottom of the tray to allow for air flow and help prevent moisture build up. The batteries shall be held in place by non-conducting phenolic resin hold down boards.				
<b>181</b>	<b>BATTERY BOX COVER</b>			
The battery box shall include a steel cover which protects the top of the batteries on the left hand side of the vehicle. The cover shall include flush latches which shall keep the cover secure as well as a black powder coated handle for convenience when opening				

<b>182</b>	<b>BATTERY CABLE</b>			
The starting system shall include cables which shall be protected by 275 degree F. minimum high temperature, flame retardant loom, sealed and encapsulated at the ends with heat shrink and sealant.				
<b>183</b>	<b>BATTERY JUMPER STUD</b>			
The starting system shall include battery jumper studs. These studs shall be located in the forward most portion of the driver's side lower step. The studs shall allow the vehicle to be jump started, charged, or the cab to be raised in an emergency in the event of battery failure.				
<b>184</b>	<b>ALTERNATOR</b>			
The starting system shall include a 270 amp Leece Neville 12 volt alternator or similar. The alternator shall include a self-excited integral regulator.				
<b>185</b>	<b>BATTERY CONDITIONER</b>			
A Kussmaul 1200 or similar battery conditioner shall be supplied. The battery conditioner shall be mounted in the cab behind the driver's seat. The display shall be mounted and viewable through the cab mid side window behind the left front door.				
<b>186</b>	<b>AUXILIARY AIR COMPRESSOR</b>			
A Kussmaul Auto Pump 120V or similar air compressor shall be supplied. The air compressor shall be installed behind the officer's seat. The air compressor shall be plumbed to the air brake system to maintain air pressure.				
<b>187</b>	<b>ELECTRICAL INLET</b>			
A Kussmaul 20 amp super auto-eject electrical receptacle or similar shall be supplied. It shall automatically eject the plug when the starter button is depressed. A single item or an addition of multiple items must not exceed the rating of the electric inlet that it's connected to. The inlet shall be installed on the left hand side of cab over the wheel well. It shall be connected to the battery conditioner and the air pump and shall include a yellow cover.				
<b>188</b>	<b>HEADLIGHTS</b>			
The cab front shall include (4) rectangular halogen headlamps with separate high and low beams mounted in bright chrome bezels. The headlamps shall be equipped with the "Daytime Running" light feature, which shall illuminate the headlights to 80% brilliance when the ignition switch is in the "On" position and the parking brake is released.				
<b>189</b>	<b>FRONT TURN SIGNALS</b>			
The front fascia shall include two (2) 4 inch by 6 inch LED programmable amber turn signals which shall be installed in a chrome bezel outboard of the front warning and headlamps. The headlights shall be located directly below the front warning lights.				
<b>190</b>	<b>SIDE TURN/MARKER LIGHTS</b>			
The sides of the cab shall include (2) LED round side marker lights which shall be provided just behind the front cab radius corners.				
<b>191</b>	<b>MARKER AND ICC LIGHTS</b>			
In accordance with FMVSS, there shall be five (5) cab LED marker lamps designating identification, center and clearance provided. These lights shall be installed on the face of the cab within full view of other vehicles from ground level.				

<b>192</b>	<b>HEADLIGHT AND MARKER LIGHT ACTIVATION</b>			
The headlights and marker lights shall be controlled through a rocker switch within easy reach of the driver. There shall be a dimmer switch within easy reach of the driver to adjust the brightness of the dash lights.				
<b>193</b>	<b>CORNERING LIGHTS</b>			
The bumper tail shall include two (2) halogen steady-on cornering lights with clear lenses in the upper position, one (1) each side.				
<b>194</b>	<b>GROUND LIGHTS</b>			
Each door shall include an incandescent NFPA compliant ground light mounted to the underside of the cab step below each door. Each light shall include a polycarbonate lens, a housing which is vibration welded and a bulb which shall be shock mounted for extended life. The ground lighting shall be activated by the opening of the respective door as well as rocker switched.				
<b>195</b>	<b>STEP LIGHTS</b>			
The middle step located at each door shall include a NFPA compliant 4 inch round, incandescent light which shall activate with the opening of the respective door. Each light shall produce 21 candle power of illumination and draw 1.5 amps.				
<b>196</b>	<b>ENGINE COMPARTMENT LIGHT</b>			
There shall be an incandescent NFPA compliant light mounted under the engine tunnel for engine work illumination. The light shall include a polycarbonate lens, a housing which is vibration welded and a bulb which shall be shock mounted for extended life.				
<b>197</b>	<b>SIDE SCENE LIGHTS</b>			
The side of the cab shall include two (2) Whelen model 810 scene lights, or similar, one (1) each side which shall be surface mounted. The lights shall offer halogen lighting with 8 to 32-degree internal optics. The scene lighting located on the driver and officer sides of the cab shall be mounted in the upper mid forward portion of the 10 inch raised roof of the cab between the front and rear crew doors. The scene lighting shall be individually activated via two (2) rocker switches, located inside the cab, one (1) per side and their respective side door.				
<b>198</b>	<b>INTERIOR OVERHEAD LIGHTING</b>			
The cab shall include a two-section incandescent dome lamp with a red and white lens located over each door. The dome lamps shall be rectangular in shape and shall measure approximately 9.5 inches long by 5 inches wide with a black colored bezel. The white portion of each lamp shall be activated by opening the respective door and both the red and white portions can be activated by individual switches on each lamp. An additional two-section incandescent red and white lamp shall be provided over the engine tunnel which can be activated by individual switches on the lamp.				
<b>199</b>	<b>MAP LIGHTS</b>			
A Roxter gooseneck style map light shall be provided. The light shall have a clear bulb and a control switch on the base. The light shall be located on the right hand side of the dash.				
<b>200</b>	<b>DO NOT MOVE APPARATUS LIGHT</b>			
The front headliner of the cab shall include a red flashing light, located in the center for greatest visibility. The light shall be 6 inches long by 2.5 inches wide by 1.75 inches high and shall be clearly labeled "Do Not Move Apparatus". In				

addition to the flashing red light, an audible alarm shall be included which shall sound when a door is open and the parking brake is released. The light and alarm shall be interlocked for activation when a cab door is not firmly closed, an apparatus cabinet door is not closed and the parking brake is released.				
<b>201</b>	<b>MASTER WARNING SWITCH</b>			
A master switch shall be included in the main rocker switch panel. The switch shall be a rocker type, red in color and labeled "Master" for identification. The switch shall feature control over all devices wired through it. Any warning device switch left in the "ON" position shall automatically power up, when the master switch is activated.				
<b>202</b>	<b>HEADLIGHT FLASHER</b>			
An alternating high beam headlamp flashing system shall be installed into the high beam headlamp circuit which shall allow the high beams to flash alternately from left to right. Deliberate operator selection of high beams will override the flashing function until low beams are again selected. Per NFPA, these clear flashing lights will also be disabled "On Scene" when the park brake is applied. The flashing headlights shall be activated through a rocker switch on the main switch panel. The rocker switch shall be clearly labeled for identification.				
<b>203</b>	<b>INBOARD FRONT WARNING LIGHTS</b>			
The cab front fascia shall include dual Whelen series 600 Super LED, or similar, warning lights which shall offer multiple flash patterns including steady burn for solid colors and multiple flash patterns for split colors. The lights shall be surface mounted to the front fascia of the cab within a chrome bezel in the inboard position. The front warning lights mounted on the fascia in the inboard positions shall include one (1) red light on the left hand side and one (1) blue on the right hand side. The front warning lights shall be controlled via a rocker switch on the main panel. This switch shall be clearly labeled.				
<b>204</b>	<b>INTERSECTION WARNING LIGHTS</b>			
The chassis shall include two (2) Whelen series 600 Super LED, or similar, 4 inch by 6 inch, red intersection warning lights, one (1) each side, which shall offer multiple flash patterns including steady burn for solid colors and multiple flash patterns for split colors. The intersection lights shall be mounted in the rear position on the side of the bumper.				
<b>205</b>	<b>SIDE WARNING LIGHTS</b>			
The cab sides shall include a Whelen series 700 Super LED, or similar, 3 inch by 7 inch, red warning lights, one (1) on each side, which shall offer multiple flash patterns including steady burn for solid colors and multiple flash patterns for split colors. The warning lights on the side of the cab shall be mounted over the front wheel well directly over the center of the front axle.				
<b>206</b>	<b>SIDE AND INTERSECTOR WARNING SWITCH</b>			
The side and intersector warning lights shall be controlled via rocker switch on the main panel. This switch shall be clearly labeled for identification.				
<b>207</b>	<b>CAB FRONT LIGHTBAR</b>			
One (1) Whelen brand Freedom FN72VLED, or similar, lightbar shall be mounted centered on the front of the cab roof. The lightbar shall be 72 inches in length and NFPA compliant. The lightbar shall feature ten (10) red LED lights and four (4) clear LED lights. The clear lights shall be disabled with park brake engaged. The cable shall exit the lightbar on the right side of the cab and shall be wired to a control switch on the cab dash.				

<b>208</b>	<b>SIDE LIGHTBARS</b>			
There shall be a FNMINI type lightbar installed on the upper rear roof of truck above the rear crew doors. The light bar shall be controlled through a rocker switch located on the main switch panel. This switch shall be clearly labeled.				
<b>209</b>	<b>SIREN CONTROL HEAD</b>			
A Federal EQ2B, or similar, 200 watt electronic siren head shall be provided and installed in the switch panel with a location specific to the customer's needs. The siren shall feature "Q" wail, yelp, air horn, PA, radio broadcast and "Q" brake. The siren shall produce 122 decibels at 10 feet away and shall include a noise cancelling microphone.				
<b>210</b>	<b>HORN RING SELECTOR SWITCH</b>			
A rocker switch shall be installed in the switch panel between the driver and officer to allow control of either the air horn or the electric horn from the steering wheel horn button. The electric horn shall sound by default when the selector switch is in either position in accordance with FMVSS requirement.				
<b>211</b>	<b>AIR HORN ACTIVATION</b>			
The air horn actuation shall be accomplished by the steering wheel horn button and a right side officer's mounted Linemaster model SP491-S81, or similar, foot switch. An air horn activation circuit shall be provided to the chassis harness pump panel harness connector.				
<b>212</b>	<b>ELECTRONIC SIREN AUXILIARY ACTIVATION</b>			
The electronic siren actuation shall also be accomplished by a black push button on the switch panel.				
<b>213</b>	<b>VEHICLE IN REVERSE ALARM</b>			
An ECCO model 575 or similar, backup alarm shall be installed at the rear of the chassis with an output level of not less than 107 dB. The alarm shall automatically activate when the transmission is placed in reverse.				
<b>214</b>	<b>INSTRUMENTATION</b>			
<p>An ergonomically designed instrument panel shall be provided. Each gauge shall be backlit with LED lamps. Stepper motor movements shall drive all gauges. The instrumentation system shall be multiplexed and shall receive ABS, engine, and transmission information over the J1939 data bus to reduce redundant sensors and wiring. The instrument panel shall contain the following gauges:</p> <p>One (1) electronic speedometer shall be included. The primary scale on the speedometer shall read from 0 to 100 MPH, and the secondary scale on the speedometer shall read from 0 to 160 KM/H.</p> <p>One (1) electronic tachometer shall be included. The scale on the tachometer shall read from 0 to 3000 RPM.</p> <p>One (1) two-movement gauge displaying primary system, and secondary system air volumes and integral LCD odometer/trip odometer shall be included on the lower portion of the LCD. The scale on the air pressure gauges shall read from 0 to 150 pounds per square inch (PSI). The air pressure scales shall be linear to operate with an accuracy of 1 degree of the measured data with a red indication zone on the gauge showing critical levels of air pressure. A red indicator light in the gauge shall indicate a low air pressure, as well as a message on the LCD screen.</p>				

The odometer shall display up to 9,999,999.9 miles. The trip odometer shall display 9,999.9 miles.

The LCD shall display Transmission Temperature in degrees Fahrenheit on the upper portion of the LCD.

The LCD screen shall also be capable of displaying certain diagnostic functions. This includes a four-movement gauge displaying engine oil pressure, coolant temperature, fuel level, voltmeter, and an indicator bar displaying Diesel Exhaust Fluid (DEF) LED bar shall be included.

The scale on the engine oil pressure gauge shall read from 0 to 120 pounds per square inch (PSI). The engine oil pressure scale shall be linear to operate with an accuracy of 1 degree of the measured data with a red indication zone on the gauge showing critical level of engine oil pressure. A red indicator light in the gauge shall indicate a low engine oil pressure, as well as a message on the LCD screen.

The scale on the coolant temperature gauge shall read from 100 to 250 degrees Fahrenheit (F). The coolant temperature scale shall be linear to operate with an accuracy of 1 degree of the measured data with a red indication zone on the gauge showing critical levels of coolant temperature. A red indicator light in the gauge shall indicate high coolant temperature, as well as a message on the LCD screen.

The scale on the fuel level gauge shall read from empty to full as a percentage of fuel remaining. An amber indicator light shall indicate low fuel at 25% tank level.

The scale on the voltmeter shall read from 10 to 16 volts with a red indication zone on the gauge showing critical levels of battery voltage. A red indicator light shall indicate high or low system voltage, as well as a message on the LCD screen.

The scale on the DEF LED bar will consist of four (4) LEDs displaying levels in increments of 25% of useable DEF in green. Upon decreasing levels, the indicator bar will change colors to notify the driver of decreasing levels of DEF and action will be required. An amber indicator light shall indicate low levels of DEF, as well as a message on the LCD screen.

The instrument panel shall include a light bar that will contain the following LED indicator lights:

**RED LAMPS -**

**Low Primary Air Pressure** (located in gauge)

**Low Secondary Air Pressure** (located in gauge)

**Stop Engine**-indicates critical engine fault

**High Transmission Temperature**-indicates excessive transmission oil temperature

**Air Filter Restricted**-indicates excessive engine air intake restriction

**Park Brake**-indicates parking brake is set

**Seat Belt Indicator**-indicates when a seat is occupied and corresponding seat belt remains unfastened

**Volts**-indicates high or low system voltage (located in gauge)

**Low Oil Pressure**-indicates low engine oil pressure (located in gauge)

**High Coolant Temperature**-indicates excessive engine coolant temperature (located in gauge)

**DEF Level Bar**-DEF level is at critically low level (located in gauge)

**AMBER LAMPS -**

**MIL**-indicates an engine emission control system fault

**Check Engine**-indicates engine fault

**Check Trans**-indicates transmission fault

**ABS**-indicates anti-lock brake system fault

**Wait to Start**-indicates active engine air preheat cycle

**HEST**-indicates a high exhaust system temperature

**Water in Fuel**-indicates presence of water in fuel filter

**DPF**-indicates a restriction of the diesel particulate filter

**Regen Inhibit**-indicates regeneration has been postponed due to user interaction

**Range Inhibit**-indicates a transmission operation is prevented and requested shift request may not occur.

**SRS**-indicates a problem in the RollTek supplemental restraint system

**Low Fuel**-indicates low fuel, (located in gauge)

**DEF**-indicates a low level of DEF fluid (located in gauge)

**DEF Level Bar**-DEF level is at a low level (located in gauge)

**GREEN LAMPS -**

**Left and Right** turn signal indicators

**ATC**-indicates low wheel traction for automatic traction control equipped vehicles, also indicates mud/snow mode is active for ATC system

**High Idle**-indicates engine high idle is active.

**Cruise Control**-indicates cruise control is active

**OK to Pump**-indicates the pump engage conditions have been met

**Pump Engaged**-indicates the pump is currently in use

**Auxiliary Brake**-indicates secondary braking device is active

**DEF Level Bar**-indicates useable levels of DEF: 25%, 50%, 75%, 100% (located in gauge)

**BLUE LAMPS -**

**High Beam Indicator**

<b>215</b>	<b>CONSTANT AUDIBLE ALARMS FROM GAUGE PACKAGE</b>			
Includes: High Trans Temp, High or Low Voltage, Seatbelt, Check Engine, Check Transmission, Stop Engine, Low Air Pressure, Fuel Low, Water in Fuel, ESC, High Coolant Temperature, Low Engine Oil Pressure, Low Coolant Level.				
<b>216</b>	<b>OSCILLATING AUDIBLE ALARMS FROM GAUGE PACKAGE</b>			
Includes: Air Filter, Extended Left and Right Turn remaining on, Cab Ajar, Door Ajar, Low Oil Level				
<b>217</b>	<b>BACKLIGHTING COLOR</b>			
The instrumentation gauges and the switch panel legends shall be backlit using white LED backlighting.				
<b>218</b>	<b>BRAKE APPLICATION PRESSURE GAUGE</b>			
Within the instrument panel, a brake application pressure gauge shall be installed				

which shall measure the application air pressure when the brakes are applied.				
<b>219</b>	<b>CAB EXTERIOR PROTECTION</b>			
The cab face shall have a removable plastic film installed over the painted surfaces to protect the paint finish during transport to the body manufacturer.				
<b>220</b>	<b>FIRE EXTINGUISHER</b>			
A 2.5 pound D.O.T approved fire extinguisher with BC rating shall be shipped loose with the cab.				
<b>221</b>	<b>DOOR KEYS</b>			
The cab and chassis shall include a total of four (4) door keys for the manual door locks.				
<b>222</b>	<b>AS BUILT WIRING DIAGRAMS</b>			
The cab and chassis shall include one (1) complete set of wiring schematics and option wiring diagrams.				
<b>223</b>	<b>OPERATORS AND PARTS LIST MANUAL</b>			
There shall be one (1) chassis operator's manual which includes a parts list. Also, wiring and air plumbing diagrams shall be provided as well as a list of any parts or equipment that is shipped loose with the vehicle. All standard wiring and plumbing diagrams shall be created specifically to the chassis model.				
<b>224</b>	<b>ENGINE AND TRANSMISSION OPERATION MANUALS</b>			
There shall be one (1) set of engine operation and maintenance manuals and one (1) set of transmission operation manuals specific to the models ordered included with the final vehicle in the ship loose items.				
<b>225</b>	<b>WARRANTY</b>			
Bidders are encouraged to submit their best OEM Warranties for each vehicle category, at no additional cost to the State. The length of the OEM warranty will be a factor in determining the lowest overall price to the State. NOTE: The bidder will have sole responsibility for all warranty issues, including the coordination of repairs for vehicle conversions such as, but not limited to, supplemental cooling systems, body defects, electrical problems, lighting systems, etc. It is to be understood the State will not coordinate a warranty repair that involves multiple parties such as a supplemental equipment provider, an installer/converter and the vehicle manufacturer/supplier. The awarded vendor will be the sole contact and coordinator of warranty repairs and service.				
<b>226</b>	<b>MINIMUM WARRANTY REQUIREMENTS</b>			
Chassis: twelve (12) months, or the first 24,000 miles, whichever occurs first.				
Paint: ten (10) years or 100,000 miles.				
Structural: ten (10) years or 100,000 miles.				
Engine: five (5) years or 100,000 miles				
Transmission: five (5) years, unlimited miles				
Front axle: two (2) years with unlimited miles				
Rear axle: two (2) years with unlimited miles				
Frame: limited lifetime warranty				



**BID QUOTATION REPLY SECTION**

**CONTRACT NO. SHS-11-002-CollapseRT**

**Collapse Rescue Truck**

Please fill out the attached forms fully and completely and return with your bid in a sealed envelope clearly displaying the contract number to Department of Safety and Homeland Security by February 23, 2011 at 3 p.m. EST at which time bids will be opened.

**Bids shall be submitted to:**

**STATE OF DELAWARE  
Department of Safety and Homeland Security  
Central Fiscal Office  
303 Transportation Circle  
Dover, Delaware 19901**

**PUBLIC BID OPENINGS**

The public bid opening insures the citizens of Delaware that contracts are being bid fairly on a competitive basis and comply with Delaware procurement laws. The agency conducting the opening is required by law to publicly open the bids at the time and place specified and the contract shall be awarded within thirty (30) days thereafter. The main purpose of the bid opening is to reveal the name(s) of the bidders(s), not to serve as a forum for determining the apparent low bidders. The disclosure of additional information, including prices, shall be at the discretion of the contracting agency until such time that the responsiveness of each bid has been determined.

After receipt of a fully executed contract(s), the Delaware public and all bidders are invited to make an appointment with the contracting officer in order to review pricing and other non-confidential information.

**NOTE: ONLY THE BIDDER'S NAME WILL BE READ AT THE BID OPENING**

CONTRACT NO.: SHS-11-002-CollapseRT

**BID QUOTATION**

**DELIVERY**

Ship Stock \_\_\_\_\_ days ARO

Ship Non-Stock \_\_\_\_\_ days ARO

CONTRACT TOTAL VALUE \$ \_\_\_\_\_

**COMPANY**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

DATE \_\_\_\_\_

STATE OF DELAWARE  
DEPARTMENT OF SAFETY AND HOMELAND SECURITY  
DELAWARE EMERGENCY MANAGEMENT AGENCY  
P.O. BOX 818  
DOVER, DE 19903-0818

NO BID REPLY FORM

**BID #SHS-11-002-CollapseRT**

**BID TITLE:** Collapse Rescue Truck

To assist us in obtaining good competition on our Request for Bids, we ask that each firm that has received an invitation, but does not wish to bid, state their reason(s) below and return in a clearly marked envelope displaying the contract number. This information will not preclude receipt of future invitations unless you request removal from the Bidder's List by so indicating below, or do not return this form or bona fide bid.

Unfortunately, we must offer a "No Bid" at this time because:

\_\_\_\_\_ 1. We do not wish to participate in the bid process.

\_\_\_\_\_ 2. We do not wish to bid under the terms and conditions of the Request for Bid document. Our objections are:

\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_ 3. We do not feel we can be competitive.

\_\_\_\_\_ 4. We cannot submit a Bid because of the marketing or franchising policies of the manufacturing company.

\_\_\_\_\_ 5. We do not wish to sell to the State. Our objections are: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_ 6. We do not sell the items/services on which Bids are requested.

\_\_\_\_\_ 7. Other: \_\_\_\_\_

\_\_\_\_\_  
FIRM NAME

\_\_\_\_\_  
SIGNATURE

\_\_\_\_\_ We wish to remain on the Bidder's List **for these goods or services.**

\_\_\_\_\_ We wish to be deleted from the Bidder's List **for these goods or services.**

10% BOND TO ACCOMPANY PROPOSAL  
(NOT NECESSARY IF CERTIFIED CHECK IS USED)

KNOW ALL MEN BY THESE PRESENTS That \_\_\_\_\_ of  
\_\_\_\_\_ of the County of \_\_\_\_\_ and State of  
\_\_\_\_\_ principal, and \_\_\_\_\_ of  
\_\_\_\_\_ of the County of \_\_\_\_\_ and the State of  
\_\_\_\_\_ as surety, legally authorized to do business in the State of  
Delaware, are held and firmly bound unto the State of Delaware in the sum of \_\_\_\_\_  
Dollars or \_\_\_\_\_ per cent (not to exceed \_\_\_\_\_ Dollars) of amount bid on Contract  
No. \_\_\_\_\_ to be paid to said State of Delaware for the use and benefit of the  
\_\_\_\_\_ of said State, for which payment well  
(hereinafter referred to as Agency)

and truly to be made, we do bind ourselves, our and each of our heirs, executors,  
administrators, and successors, jointly and severally for and in the whole, firmly by these  
presents.

NOW THE CONDITION OF THIS OBLIGATION IS SUCH That if the above bounden  
principal \_\_\_\_\_ who has submitted to said Agency of the State of  
Delaware, a certain proposal to enter into a certain contract to be known as Contract No.  
\_\_\_\_\_, for the furnishing of certain products and/or services within the said State of  
Delaware shall be awarded said Contract No. \_\_\_\_\_, and if said \_\_\_\_\_  
shall well and truly enter into and execute said Contract No. \_\_\_\_\_ and furnish  
therewith such surety bond as may be required by the terms of said contract and approved by  
said Agency, said contract and said bond to be entered into within twenty days after the date of  
official notice of the award thereof in accordance with the terms of said proposal, then this  
obligation to be void or else to be and remain in full force and virtue.

Sealed with \_\_\_\_\_ seal and dated this \_\_\_\_\_ day of \_\_\_\_\_  
in the year of our Lord two thousand and \_\_\_\_\_ (20\_\_\_\_).

SEALED AND DELIVERED IN THE

Presence Of \_\_\_\_\_

\_\_\_\_\_  
Name of Bidder (Principal) (Seal)

Witness

\_\_\_\_\_  
(Seal) BY \_\_\_\_\_

Corporate  
Seal

\_\_\_\_\_  
\_\_\_\_\_  
Title

\_\_\_\_\_  
BY \_\_\_\_\_

\_\_\_\_\_  
Name of Surety (Seal)  
\_\_\_\_\_  
(Seal)  
\_\_\_\_\_  
Title

CONTRACT NO.: SHS-11-002-CollapseRT  
TITLE: Collapse Rescue Truck  
OPENING DATE: Insert Date of Bid Opening

**NON-COLLUSION STATEMENT**

This is to certify that the undersigned bidder has neither directly nor indirectly, entered into any agreement, participated in any collusion or otherwise taken any action in restraint of free competitive bidding in connection with this bid submitted this date to Department of Safety and Homeland Security.

It is agreed by the undersigned bidder that the signed delivery of this bid represents the bidder's acceptance of the terms and conditions of this Invitation to Bid including all specifications and special provisions.

**NOTE:** Signature of the authorized representative **MUST** be of an individual who legally may enter his/her organization into a formal contract with the State of Delaware, Department of Safety and Homeland Security.

COMPANY NAME \_\_\_\_\_

Check one)	
<input type="checkbox"/>	Corporation
<input type="checkbox"/>	Partnership
<input type="checkbox"/>	Individual

NAME OF AUTHORIZED REPRESENTATIVE  
(Please type or print) \_\_\_\_\_

SIGNATURE \_\_\_\_\_ TITLE \_\_\_\_\_

COMPANY ADDRESS \_\_\_\_\_

PHONE NUMBER \_\_\_\_\_ FAX NUMBER \_\_\_\_\_

EMAIL ADDRESS \_\_\_\_\_

FEDERAL E.I. NUMBER \_\_\_\_\_ STATE OF DELAWARE  
LICENSE NUMBER \_\_\_\_\_

COMPANY CLASSIFICATIONS: CERT. NO.	(circle one)		(circle one)		(circle one)	
	<u>Women</u>	Yes No	<u>Minority</u>	Yes No	<u>Disadvantaged</u>	Yes No
	<u>Business</u>		<u>Business</u>		<u>Business</u>	
	<u>Enterprise</u> (WBE)		<u>Enterprise</u> (MBE)		<u>Enterprise</u> (DBE)	

[The above table is for information and statistical use only.]

PURCHASE ORDERS SHOULD BE SENT TO:

(COMPANY NAME) \_\_\_\_\_

ADDRESS \_\_\_\_\_

CONTACT \_\_\_\_\_

PHONE NUMBER \_\_\_\_\_ FAX NUMBER \_\_\_\_\_

EMAIL ADDRESS \_\_\_\_\_

**AFFIRMATION:** Within the past five years, has your firm, any affiliate, any predecessor company or entity, owner, Director, officer, partner or proprietor been the subject of a Federal, State, Local government suspension or debarment?

YES \_\_\_\_\_ NO \_\_\_\_\_ if yes, please explain \_\_\_\_\_

**THIS PAGE SHALL BE SIGNED, NOTARIZED AND RETURNED FOR YOUR BID TO BE CONSIDERED**

SWORN TO AND SUBSCRIBED BEFORE ME this \_\_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_\_

Notary Public \_\_\_\_\_ My commission expires \_\_\_\_\_

City of \_\_\_\_\_ County of \_\_\_\_\_ State of \_\_\_\_\_



## **State of Delaware**

### **Office of Minority and Women Business Enterprise Certification Application**



#### **Complete application and mail, email or fax to:**

Office of Minority and Women Business Enterprise (OMWBE)  
100 Enterprise Place, Suite 4  
Dover, DE 19904  
Telephone: (302) 857-4554 Fax: (302) 677-7086  
Email: [deomwbe@state.de.us](mailto:deomwbe@state.de.us)  
Web site: <http://gss.omb.delaware.gov/omwbe/index.shtml>

## Important Information Please Read!

### Is my firm eligible?

A minority and/or women owned business (sole-proprietorship, partnership, corporation or joint venture) must meet the following criteria:

- a) Minority groups include: African Americans, Asian/Pacific Americans, Hispanic Americans, Native Americans, and Subcontinent Asian Americans.
  - b) At least 51 percent owned, controlled and actively managed by minority group members or by women.
  - c) Serving a for profit business with “useful business functions.”
- An out-of-state company must first **be certified in its home state** before it can be considered for certification in Delaware. This must be a state-level certification, if available.
  - There is no fee for processing your application. In addition, free assistance is available. If you have questions about the application or your company’s qualifications, call (302)857-4554.
  - If your business is certified by **Delaware Department of Transportation (DelDOT), City of Wilmington, Minority Supplier Development Council (MSDC), Women Business Enterprise National Council (WBENC) and located in Delaware**, there is a specialized application. You must also attach a copy of your certification and mail all documents to the OMWBE.
  - Also, please note that it is extremely important to provide other certifying agency documentation. This can expedite the certification process.

## Document Request checklist

- **Unless otherwise indicated, copies of documents are sufficient.**
- **Any deficiency may delay the certification process.**
- **Certification generally takes four to six weeks.**
- **An on-site visit.** *(The OMWBE office may schedule an on-site visit once the completed application and appropriate supporting documentation have been received).*

<b>Documents to attach to your application</b>	<b>Sole Prop</b>	<b>Part/ LLP</b>	<b>Corp/ S-Corp</b>	<b>LLC</b>	<b>OMWBE Use</b>
Notarized Minority and Women Business Enterprise Affidavit form	Yes	Yes	Yes	Yes	
Copy of any of the following state identification, license, birth certificate, permanent resident card, passport or tribal memberships	Yes	Yes	Yes	Yes	
Copy of MBE/WBE certification from home state, if company headquarters are not in Delaware. (must be a state level certification, if available)	Yes	Yes	Yes	Yes	
Copies of any relevant licenses, certificates of training and degrees held by the company or its owners/employees	Yes	Yes	Yes	Yes	
Partnership Agreement, including any amendments, buy-out rights as well as any profit sharing arrangements		Yes			
Articles of Incorporation with all amendments			Yes		
Minutes of the last annual shareholders meeting			Yes		
By-laws and By-law Amendments			Yes		
Copy of most recent Stock Ledger			Yes		
Copy of Certificate of Organization				Yes	
Copy of Operating Agreement				Yes	
<b>Optional Information – Please read below for advantages of tax document submission*</b>					
Last two years of your firm's tax returns (gross receipts). If not available, last two years W2 and/or 1099 forms for all owners, directors, officers and senior management.	Yes	Yes	Yes	Yes	

\* Submitting tax information provides OMWBE with documentation required to identify the business as a small business. If you would like to be identified as a small minority and women business enterprise please submit tax information. For additional information on small business criteria please visit <http://www.ccr.gov/SizeStandard.aspx> or <http://www.sba.gov/index.html> (most requested items). Please note the categorization of small business may provide additional opportunities.



## **Delaware Minority and/or Women Business Enterprise Certification**

### **Certification Application**

The following is the application for Minority and/or Women Business Enterprise (MWBE) certification with the State of Delaware. All questions must be answered. Please type or print clearly.

### **Questions that do not apply to your firm should be marked N/A in the space provided.**

The Affidavit on page 14 must be signed and notarized by a Notary Public. Faxed copies of the Affidavit will only be accepted if the notary seal has the stamped seal with the expiration date visible. Otherwise, mail the original Affidavit with the raised seal to our office.

Please return the completed application with signature and required notarization to the address below:

**Office of Minority and Women  
Business Enterprise  
100 Enterprise Place, Suite 4  
Dover, DE 19904  
Phone: (302) 857-4554  
Fax: (302) 739-3779  
Web site: [www.omwbe.delaware.gov](http://www.omwbe.delaware.gov)**

### **Definitions**

#### **Minority and/or Women Business Enterprise**

A Minority and Women Business Enterprise is a business that is at least 51 percent owned, controlled and actively managed by minority and/or women group members who are United States citizens or persons lawfully admitted to the United States for permanent residence.

The business must be a for-profit business and currently be performing a useful function.

**Minorities** – United States citizens or permanent residents who are African Americans, Asian/Pacific Americans, Hispanic Americans, Native Americans, Subcontinent Asian Americans, or as defined herein:

**African (Black) Americans.** All persons having origins from any of the Black groups of Africa and all persons having origins in any of the original peoples of the Cape Verde Islands.

**Asian/Pacific Americans.** All persons having origins from any of the original peoples of the Far East, Asia, or the Pacific Islands, including China, Japan, Korea, Samoa, Philippine Islands, and Hawaii. Guam, the U.S. Trust Territories of the Pacific or the Northern Marinas.

**Hispanic Americans.** All persons having origins from Mexican, Puerto Rican, Cuban, Dominican, Central or South American, or others Spanish or Portuguese culture or origin, regardless of race.

**Native Americans.** All persons having origins from the original peoples of North America and who are recognized as Native Americans by a tribe or tribal organization.

**Subcontinent Asian Americans.** All persons whose ancestors originated in India, Pakistan or Bangladesh.

**Certification** - A determination by the OMWBE that a for-profit business entity is a Minority Business Enterprise (MBE) and/or Women Business Enterprise (WBE).

## Definitions

### Ownership

The minority or woman ownership interest in the firm must be real, substantial and continuing and shall go beyond the pro forma ownership of the business as reflected in its ownership documents. The minority and women owners shall enjoy the customary incidents of ownership and shall share in the risks and profits commensurate with their ownership interest as demonstrated both by an examination of the substance and form of arrangements.

### Control

Control will be exemplified by possession of the requisite knowledge and expertise to run the particular business. Control includes the authority to determine the direction of a business, including but not limited to capital investments and all other financial transactions; property acquisitions; day-to-day decisions; contract negotiations; legal matters; selection and hiring of officers, directors, and employees; operating responsibility; cost-control; income and dividend matters; and the rights of other shareholders or partners.

The minority and/or women owners must hold the highest officer position in their companies, example chief executive officer or president.

The minority and/or women must demonstrate that they possess the experience, expertise and knowledge to operate their particular types of business.

Expertise limited to office management, administration, or bookkeeping functions unrelated to the principal business activities of the company is insufficient to demonstrate control. Women and/or minority owners must also verify that they hold any licenses or certification required by the type of business in which they are engaged.

## Definitions

**Minority Business Enterprise (MBE)** - A for profit business in which at least 51% of the beneficial ownership interest and control are held by a minority or minorities. In the case of a corporation, minorities must hold at least 51% of voting interest.

**Minority & Women Business Enterprise (MWBE)** - A for-profit business in which at least 51% of beneficial interest and control is held by minority women or by an equal combination of minorities and women. In the case of a corporation, women and minorities must also hold at least 51% of voting interest.

**Women Business Enterprise (WBE)** - A for-profit business in which at least 51% of beneficial interest and control is held by women. In the case of a corporation, women must also hold at least 51% of the voting interest.

### Useful Business Function

A useful business function is one, which results in the provision of materials, supplies, equipment or services to consumers in the State. A business acting as a conduit to transfer funds to a non-minority business does not constitute a useful business function unless doing so is a normal industry practice.

### Benefits of Certification

Current certified minority and/or women owned firms are eligible to be listed in the State of Delaware Directory of Minority and Women Owned Businesses which is circulated to all state and local government agencies.

### Recertification

At the ends of three years from original certification date, firms must submit the recertification affidavit to remain actively visible in the State of Delaware's Minority and/or Women Business Enterprise database.

## Eligibility

A minority and women owned business (sole-proprietorship, partnership, corporation or joint venture) must meet the following criteria:

- a) Belong to a minority group: African Americans, Asian/Pacific Americans, Hispanic Americans, Native Americans, and Subcontinent Asian Americans.  
*(Please reference above definitions)*
- b) At least 51 percent owned, controlled and actively managed by minority group members or by women.
- c) Serving a for profit business with "useful business functions."  
*(Please reference above definitions)*

**Reasons for denial** *(please note the below may include but not be limited to)*

- a) A business located in a state other than Delaware must first obtain state-level certification in its home state.
- b) All securities, which constitute ownership and/or control of a corporation for the purpose of establishing it as a MWBE, must be held directly by minorities or women. No securities held in trust, or by a guardian for a minor, shall be considered as held by a minority or women in determining the ownership or control of a corporation.
- c) If the business operations do not reflect the ownership shown on paper.

- d) Firm is not a for-profit business
- e) Firm has provided false or misleading information
- f) Control will not be deemed to exist in cases of simple majority or absentee ownership, or when a non-minority/non-female owner or employee of the firm is disproportionately responsible for its operation.
- g) The firm shall not be subject to any formal or informal restrictions through, for example through, by-laws provisions, partnership agreements, or charter requirements for cumulative voting rights or otherwise that prevents the minority and women owners, without the cooperation or vote of any owner who is not a minority or women for making a business decision of the firm.
- h) If the owners of the firm who are not minorities or women are disproportionately responsible for the operation of the firm, then the firm is not controlled by minorities and shall not be considered as MWBE within the meaning of the definition. Where the actual management of the firm is contracted out to individuals other than the owner, those person who have the ultimate power to hire and fire the managers, can, for the purpose of this
- i) The certification application was submitted incomplete.

## How to Apply

- Applications and additional information are available by calling the Office of Minority and Women Business Enterprise at (302) 857-4554 or visiting the web site [www.omwbe.delaware.gov](http://www.omwbe.delaware.gov)
- Complete an application for certification and provide required documentation (ethnic status of minority owner(s), financial records, on-going business activity, etc.)
- Provide access to its business facilities and key personnel for state certification on-site visit.

## WHERE TO APPLY:

Submit completed applications to:  
Office of Minority and Women Business  
Enterprise  
100 Enterprise Place, Suite 4  
Dover, DE 19904

## Frequently Asked Questions

For complete list of questions, please review the FAQ web site below  
<http://gss.omb.delaware.gov/omwbe/faqs.shtml>

State of Delaware Minority and/or Women Business Enterprise Application  
*All completed applications must be returned with the appropriate requested documents listed.*

**Please type or print clearly**

OMWBE use only: Application Date:

Mail application to:  
Office of Women and Minority Business Enterprise  
100 Enterprise Place, Suite 4  
Dover, DE 19904

If you have any questions regarding the completion of this application, please contact us at (302) 857-4554

**Note – This section must be filled out in its entirety for the application to be processed.  
Incomplete applications will not be processed.**

<b>1. Business Name(s), Contact Information, Federal Employee Identification Number or Social Security Number(FEIN/SSN)</b>				
Legal Name of Firm:				
Doing Business As (If applicable):				
Federal E.IN or SSN:		E-Mail Address:		
Address line 1:				
Address line 2:				
City		State	Zip Code	Country
Telephone Number:		Extension:	Fax Number:	
Company Web Site Address:				
Corp <input type="checkbox"/>	LLC* <input type="checkbox"/>	S Corp <input type="checkbox"/>	Partnership <input type="checkbox"/>	LLP** <input type="checkbox"/>
Sole Proprietor <input type="checkbox"/>		Joint Venture <input type="checkbox"/>		
<b>If you are a non profit please discontinue completing the application. You must be a for profit business.</b>				
Date firm was established?				
Date firm began doing business (date of first contract or sale)				
* Limited Liability Corporation				
** Limited Liability Partnership				

<b>2. Primary owner applicant information</b>				
Name:		Title:		
Home Address:		City:	State:	Zip Code: Country:
Telephone Number:		Extension:	Fax Number:	
E-Mail Address:				
Date owner acquired controlling interest?				
Sex: <input type="checkbox"/> M <input type="checkbox"/> F		Ethnic Group:		
U.S. Citizen or Permanent Resident:		<input type="checkbox"/> No <input type="checkbox"/> Yes		

<b>3. Firm is applying as: Please select either MBE or WBE based on the primary owner</b>			
<b>Minority Business Enterprise</b>		<b>Women Business Enterprise</b>	
<input type="checkbox"/> African American	<input type="checkbox"/> Asian American	<input type="checkbox"/> African American	<input type="checkbox"/> Asian American
<input type="checkbox"/> Hispanic American	<input type="checkbox"/> Native American	<input type="checkbox"/> Hispanic American	<input type="checkbox"/> Native American
<input type="checkbox"/> Subcontinent Asian	<input type="checkbox"/> Other	<input type="checkbox"/> Subcontinent Asian	<input type="checkbox"/> White American
		<input type="checkbox"/> Other	

**4. Describe, in detail, what product(s) and/or services your business provides. Attach additional pages and/or the company's catalog or inventory list, if needed. Please note the below capabilities narrative will be posted on the OMWBE web site.**

--

**5. Six digit North American Industry Classification System (NAICS) Code(s):**  
 (To assist you in determining your NAICS Code(s) go to <http://www.census.gov/eos/www/naics> )  
 This must be completed if you need additional assistance please call OMWBE

1.	2.	3.	4.	5.	6.
----	----	----	----	----	----

**Four digit United Nations Standard Products and Services Code® (UNSPSC®)**  
 (To assist you in determining your UNSPSC Code(s) go to <http://www.unspsc.org>)

1.	2.	3.	4.	5.	6.
----	----	----	----	----	----

<b>6. Type of Business</b>		
<input type="checkbox"/> Building trade	<input type="checkbox"/> Manufacturer	<input type="checkbox"/> Other
<input type="checkbox"/> Consultant	<input type="checkbox"/> Supplier	
<input type="checkbox"/> Generalized service	<input type="checkbox"/> Highway Construction	
<input type="checkbox"/> Licensed professional services		

**7. Provide the following information for: 1) all business owners, 2) corporate directors (if incorporated), 3) officers, and 4) senior management. If more space is needed, attach additional pages.**

Name	Title	Date Appointed	Gender	Ethnicity
<b>Officers of the Company</b>				
<b>Board of Directors</b>				

**8. Is any owner or board member of the business, an owner or former owner of another firm engaged in the same or similar type of enterprise?**

☐ No ☐ Yes (If yes, identity below)

**9. Are there any written, oral, or implied agreements between persons associated in any manner with the firm concerning its ownership and/or operation? (check one)** ☐ No ☐ Yes

**10. Please list the gross receipts of last two years**

(A) Year Ending: Gross Receipts:

(B) Year Ending: Gross Receipts:

**11. Number of employees**

Full time:

Part time:

Seasonal (approximate):

**12. List names and titles of persons who perform the following functions. If more than one, indicate what percent each person handles.**

	Name	Ethnicity	Gender
Financial Decisions			
Estimating & Bidding			
Negotiating & Contract Execution			
Personnel Management			
Field/Production Operations Supervisor			
Office Management			
Marketing/Sales			
Purchasing of Major Equipment			
Authorized to Sign Company Checks (for any purpose)			

<b>13. Identify persons or firms who provide Legal, Accounting, and Banking services:</b>			
<b>Attorney:</b>		Contact:	
Phone:	Fax:	Email:	
Address:			
<b>Accountant:</b>		Contact:	
Phone:	Fax:	Email:	
Address:			
<b>Bank:</b>		Contact:	
Phone:	Fax:	Email:	
Address:			

<b>14. If the business is a corporation or LLC, please list the following information:</b>
a. Total shares authorized:
b. Total shares issued to date:
c. Are there any restrictions that limit the voting rights of ethnic minority group members, who are shareholders, within the By-laws or Articles of Incorporation, or any other documents? <input type="checkbox"/> No <input type="checkbox"/> Yes (If yes, please explain below)

<b>15. List the three largest contracts or sales completed by the firm during the last three years. List each customer's name and company or organization, the dollar amount of each contract or sale, and the date completed. If any are subcontracts, provide the name of the firm to which you subcontracted.</b>			
<b>1. Company or Individual:</b>			
Address, City, State:			
Phone:	Fax:	Email:	
Description & Amount:			
<b>2. Company or Individual:</b>			
Address, City, State:			
Phone:	Fax:	Email:	
Description & Amount:			
<b>3. Company or Individual:</b>			
Address, City, State:			
Phone:	Fax:	Email:	
Description & Amount:			



**16. Has this firm or other firm(s) owned by any of its current owners or officers ever been denied certification by the OMWBE or any other certifying entity (check one)?** ☐ No; ☐ Yes (If yes, provide the name of the certifying organization and the reason(s) given for denial, below. Attach copies of any relevant documents (letters, appeal documents, etc.).)

**17. Debarment: Is this company, or any other company owned in full or part by any of this company's owners and/or officers, currently prohibited from doing business with the State of Delaware (i.e., license revocation or denial)?** ☐ No; ☐ Yes.

**18. Is the Business certified as a M/W/BE with any other certifying agency? If yes, provide the name(s) of the certifying organization(s), below, and attach letters or other documents verifying such certification.**

☐ No ☐ Yes

Name	Date Certified	Expiration Date
a.		
b.		
c.		
d.		
e.		
f.		

**19a. Is the business classified as a small business as identified by The regulations specifying size standards and governing their use are set forth in Title 13, Code of Federal Regulations, part 121 (13 CFR part121), Small Business Size Regulations. For more information please visit <http://www.ccr.gov/SizeStandard.aspx>**

☐ No ☐ Yes

**19b. Is the business registered with the Central Contractor Registration [www.ccr.gov](http://www.ccr.gov) (Please provide proof of registration)**

☐ No ☐ Yes

**20. How did you hear about the Office of Minority and Women Business Enterprise:**

<input type="checkbox"/> OMWBE staff speak at an event sponsored by another organization	<input type="checkbox"/> OMWBE staff at a trade show or expo
<input type="checkbox"/> OMWBE's web site	<input type="checkbox"/> Materials published by OMWBE
<input type="checkbox"/> Referred by another organization	<input type="checkbox"/> Referred by the owner of an MBE or WBE
<input type="checkbox"/> Delaware state employee	<input type="checkbox"/> Other, please explain briefly:

## Optional Questions

You are not required to answer the following questions and the answers will not affect your company's eligibility for certification. However, the answers will help OMWBE to identify business opportunities that may be suited to your company. Answers may be estimated; exact figures aren't necessary.

<b>For all companies</b>
How many years has your company been conducting business with you as owner?
How many contracts, subcontracts, and/or sales has your company completed during the last 12 months?
What is the largest contract, subcontract, or sale your company completed in the past 24 months?
Has your company done any business with government? <input type="checkbox"/> No; <input type="checkbox"/> Yes
If yes, what level of government (check all that apply): <input type="checkbox"/> Federal; <input type="checkbox"/> State; <input type="checkbox"/> Local
Has your company done any business with government in the State of Delaware? <input type="checkbox"/> No; <input type="checkbox"/> Yes
Number of government contracts, subcontracts, or sales completed (estimate):
<b>For Construction-Related Companies Only (not including suppliers of construction materials)</b>
What is your company's bonding capacity? \$ (indicate "unknown" if you do not know)
What % of your business is direct contracting?
What % of your business is subcontracting?

# State of Delaware Minority and/or Women Business Enterprise Affidavit

Hereafter, "the Business" refers to

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Business Name

I understand the illegal nature of receiving public or private funds or other property as a consequence of false representation as to the minority and/or woman status of the business and do herein certify under penalty imposed by Delaware statutes that the information provided is correct and said information herein may be used for the purposes of certifying the business as a Minority and/or Women Business Enterprise. Any false representation will be grounds for denying certification or initiating decertification in the future.

I agree to make available for inspection to the MWBE office any such materials that may be required to substantiate the degree of minority and women ownership and control of the business. I agree to arrange for on-site inspections of the business' facilities in order to verify information provided in this document.

I agree to provide written information relative to any future change in ownership and/or management of the business to the MWBE office within two weeks of the occurrence of the change. I acknowledge that failure to timely submit required change of status documentation might result in the decertification of the business.

I understand that the certification expiration is three years following the initial date of certification. I further understand that the business must apply for recertification prior to the expiration.

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Type or Print Name of Owner

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Signature of Owner

Date

---

Title

Subscribed and sworn to before me this \_\_\_\_\_ day of  
\_\_\_\_\_ a.d.

Month, Year

Signed \_\_\_\_\_

NOTARY PUBLIC IN AND FOR THE

County of \_\_\_\_\_

State \_\_\_\_\_

My Commission Expires \_\_\_\_\_

Date

Notary Seal

January 5, 2011

Delaware MEP  
400 Stanton-Christiana Road - Suite A-158  
Newark, DE 19713

To Whom It May Concern:

Department of Safety and Homeland Security currently has the following procurement opportunity available and would appreciate your efforts in notifying Delaware companies who may be interested in reviewing the contract specifications and submitting a bid.

1. Contract Description: Collapse Rescue Truck
2. Contact Person: Tom Yeasted  
Phone No. (302) 659-2352
3. Contract No. SHS-11-002-CollapseRT
4. Bid Deadline: February 23, 2011
5. Bid Opening Location: Department of Safety and Homeland Security, 303 Transportation Circle, Dover, DE 19901.

**All bids must clearly display the contract number on the sealed envelope.**

Sincerely,

Stephanie Young  
Fiscal Analyst